

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 13:19:44 ON 25 MAR 2002

L3 18266 S SALMONELLA TYPHI
L4 3872 S SALMONELLA PARATYPHI
L5 1557 S L3 AND L4
L6 135 S L5 AND VACCINE?
L7 114 DUP REM L6 (21 DUPLICATES REMOVED)
L8 8 S L7 AND ADJUVANT
L9 20 S L6 AND ATTENUATED

=> D L9 BIB AB 1-20

L9 ANSWER 1 OF 20 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1989:172785 BIOSIS
DN BR36:84026
TI CLINICAL EXPERIENCE WITH TYPHOID **VACCINE** IN THAILAND.
AU SARASOMBATH S
CS DEP. MICROBIOL., FAC. MED. SIRIRAJ HOSP., MAHIDOL UNIV., BANGKOK 10700,
THAILAND.
SO SEAMEO-TROPED (SOUTHEAST ASIAN MINISTERS OF EDUCATION
ORGANIZATION-TROPICAL MEDICINE AND PUBLIC HEALTH PROJECT) TECHNICAL
MEETING OF THE VACCINES FOR TROPICAL DISEASES OF PUBLIC HEALTH IMPORTANCE
IN SOUTHEAST ASIA, BANGKOK, THAILAND, FEBRUARY 1-4, 1988. SOUTHEAST ASIAN
J TROP MED PUBLIC HEALTH. (1988) 19 (3), 471-474.
CODEN: SJTMAK. ISSN: 0125-1562.
FS BR; OLD
LA English

L9 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2002 ACS
AN 1999:487376 CAPLUS
DN 131:126395
TI Live **attenuated** salmonella **vaccines**
IN Gubbels, Elina; De Greve, Henri; Hernalsteens, Jean-Pierre
PA Vrije Universiteit Brussel, Belg.
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9937759	A2	19990729	WO 1999-BE7	19990122
	WO 9937759	A3	19991014		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 943681	A1	19990922	EP 1998-870019	19980122
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	AU 9921444	A1	19990809	AU 1999-21444	19990122
PRAI	EP 1998-870019		19980122		
	EP 1998-870202		19980924		
	WO 1999-BE7		19990122		
AB	The present invention is related to a vaccine for inducing an immune response to a Salmonella strain in an animal, including a human, characterized in that it comprises a pharmaceutically acceptable carrier and a genetically modified Salmonella strain which is in an amt. effective to produce an immune response. Said vaccine comprises				

genetically modified wild type DNA, preferably mutated in the spiC, aro, pur, dap, pab, sipC, phoP, phoQ, and/or pagC gene regions. The **vaccine** of the invention may be used to increase or regulate the humoral, local, and/or cellular response of the immune system against Salmonella strains, other pathogenic agents, or other epitopes. As examples, **vaccines** comprising mutations to S. enteritidis and S. typhimurium are disclosed.

L9 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1999:343671 CAPLUS
 DN 130:351225
 TI Recombinant **vaccines** comprising immunogenic **attenuated** bacteria having rpos positive phenotype
 IN Curtiss, Roy, III; Nickerson, Cheryl A.
 PA Washington University, USA
 SO PCT Int. Appl., 163 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9925387	A1	19990527	WO 1998-US24295	19981113
	W:		AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	US 6024961	A	20000215	US 1997-970789	19971114
	AU 9914595	A1	19990607	AU 1999-14595	19981113
	AU 736242	B2	20010726		
	EP 1030690	A1	20000830	EP 1998-958581	19981113
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI		
	JP 2001523649	T2	20011127	JP 2000-520820	19981113
PRAI	US 1997-970789	A2	19971114		
	WO 1998-US24295	W	19981113		

AB **Attenuated** immunogenic bacteria having an RpoS+ phenotype, in particular, Salmonella enterica serotype typhi having an RpoS+ phenotype and methods therefor are disclosed. The Salmonella have in addn. to an RpoS+ phenotype an inactivating mutation in one or more genes which render the microbe **attenuated**, and a recombinant gene capable of expressing a desired protein. The Salmonella are **attenuated** and have high immunogenicity so that they can be used in **vaccines** and as delivery vehicles for genes and gene products. Also disclosed are methods for prepg. the **vaccine** delivery vehicles. Described were **vaccines** contg. the disclosed Salmonella delivery vehicle and hepatitis B nucleocapsid pre-S1 pre-S2 particles, interleukin 2, sperm-specific antigen ZP-3 (as contraceptive **vaccine**), NALT, BALT, CALT, GALT proteins, and others.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:794801 CAPLUS
 DN 130:37299
 TI Attenuation of **Salmonella typhi** for **vaccine** application
 IN Miller, Samuel I.; Mekalanos, John J.
 PA The General Hospital Corporation, USA; President and Fellows of Harvard College

SO U.S., 69 pp., Cont.-in-part of U.S. 5,695,983.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5843426	A	19981201	US 1995-565861	19951201
	US 5599537	A	19970204	US 1993-90526	19930709
	US 5695983	A	19971209	US 1994-271354	19940706
	WO 9720033	A1	19970605	WO 1996-US19190	19961127
	W: AU, CA, CN, JP, KR, MX, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9711441	A1	19970619	AU 1997-11441	19961127
	EP 870011	A1	19981014	EP 1996-942851	19961127
	R: BE, CH, DE, FR, GB, IT, LI, LU, MC, IE				
PRAI	US 1990-629602	B2	19901218		
	US 1993-90526	A2	19930709		
	US 1994-271354	A2	19940706		
	US 1995-565861	A	19951201		
	WO 1996-US19190	W	19961127		
AB	The invention features a Salmonella cell for which the virulence is attenuated by a deletion of a portion of the PhoQ gene. This deletion results in the dysregulation of the genes regulated by the PhoP regulon, i.e., the pag and prg loci. These cells may also have a deletion of the PhoP gene and a mutation or the arom. amino acid metab. system. Such attenuation results in greater phagocytic killing by macrophages. Immunization of volunteers with the Salmonella Ty800 cell induced a humoral response to capsular antigens.				

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1997:505737 CAPLUS

DN 127:107985

TI Salmonella **vaccines** created by deletions in the phoQ and phoP genes

IN Miller, Samuel I.; Mekalanos, John J.

PA General Hospital Corporation, USA; President and Fellows of Harvard College

SO PCT Int. Appl., 175 pp. 3

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9720033	A1	19970605	WO 1996-US19190	19961127
	W: AU, CA, CN, JP, KR, MX, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5843426	A	19981201	US 1995-565861	19951201
	AU 9711441	A1	19970619	AU 1997-11441	19961127
	EP 870011	A1	19981014	EP 1996-942851	19961127
	R: BE, CH, DE, FR, GB, IT, LI, LU, MC, IE				
PRAI	US 1995-565861	A	19951201		
	US 1990-629602	B2	19901218		
	US 1993-90526	A2	19930709		
	US 1994-271354	A2	19940706		
	WO 1996-US19190	W	19961127		
AB	A defined deletion of 956 bp in the contiguous phoP and phoQ genes in Salmonella typhi Ty3 produced a strain (Ty800) useful as a live, attenuated typhoid fever vaccine in human volunteers. The phoP/phoQ deletion in the arom. amino acid auxotrophic S. typhi 514Ty resulted in strain Ty445 and virulence was further				

attenuated in the aroA/phoP regulon double mutant. A major advantage of Ty800 appears to be the large doses which may be delivered orally without development of bacteremias, suggesting that this strain may be particularly well suited for engineering as a live vector for delivery of heterologous antigens to the gastrointestinal lymphoid tissue. Thus, pagC gene product-antigen AP fusion proteins were produced in Salmonella live **vaccines** using the environmentally regulated T7 polymerase system and the aerobactin gene promoter of Escherichia coli. DNA fragments regulated by the phoP and phoQ regulon were isolated, sequenced, and shown to encode virulence-assocd. proteins; the 2 fragments encoded genes pagD/envE/msgA/envF and prgH/prgI/prgJ/prgK, resp.

L9 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1995:498402 CAPLUS

DN 122:260944

TI Attenuation of Salmonella by mutation in virulence-related genes for **vaccines**

IN Miller, Samuel I., III; Mekalanos, John J.

PA General Hospital Corp., USA; President and Fellows of Harvard College

SO PCT Int. Appl., 181 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9502048	A1	19950119	WO 1994-US7658	19940707
	W: AU, CA, CN, JP, KR, NZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5599537	A	19970204	US 1993-90526	19930709
	US 5695983	A	19971209	US 1994-271354	19940706
	AU 9473259	A1	19950206	AU 1994-73259	19940707
	AU 694948	B2	19980806		
	EP 717777	A1	19960626	EP 1994-923374	19940707
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI	US 1993-90526	A	19930709		
	US 1994-271354	A	19940706		
	US 1990-629602	B2	19901218		
	WO 1994-US7658	W	19940707		

AB **Vaccine** strains of Salmonella that do not cause a transient bacteremia have their virulence **attenuated** by a mutation in a gene up- or down-regulated by the PhoP gene, e.g. the prg or pag genes, and a mutation in a gene for arom. amino acid biosynthesis. A no. of the PhoP-regulated genes are also cloned and characterized. A **vaccine** strain of Salmonella typhimurium with a HpaI deletion from the PhoP gene was prepd. and characterized. Mice inoculated with 2.3.times.10⁵ or 2.3.times.10⁶ cfu of the **vaccine** strain were challenged after 30 days with 30 LD₅₀ of a virulent S. typhimurium. All but one of the 30 mice tested survived the challenge. Preliminary tests on human subjects are reported.

L9 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1994:215327 CAPLUS

DN 120:215327

TI Bivalent live **vaccines** against pathogenic intestinal bacteria and their production by recombinant DNA techniques

IN Brahmhatt, Himanshu; Timmis, Kenneth

PA Gesellschaft fuer Biotechnologische Forschung mbH (GBF), Germany

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 4221840	A1	19940105	DE 1992-4221840	19920703
	WO 9401562	A1	19940120	WO 1993-EP1715	19930702
	W: AU, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9345637	A1	19940131	AU 1993-45637	19930702
PRAI	DE 1992-4221840		19920703		
	WO 1993-EP1715		19930702		

AB The microorganisms in the title **vaccines** express complete bivalent lipopolysaccharide (LPS) with core lipid A of the microorganism and heterologous polysaccharide O antigens. **Vaccines** are typically derived from **attenuated Salmonella typhi** Ty21a and express O antigens from Shigella dysenteriae 1, Shigella sonnei, Shigella flexneri, Shigella boydii, Vibrio cholerae, **Salmonella paratyphi**, or enteropathogenic Escherichia coli. Thus, **Salmonella typhi** Ty21a, bearing the gene for Shigella dysenteriae 1 O antigen, was transformed with a plasmid contg. E. coli K-12 gene rfaL, which encodes the O antigen-core ligase which attaches the O antigen polysaccharide to the LPS core. The transformed bacteria expressed the Shigella dysenteriae 1 O antigen attached to the **Salmonella typhi** Ty21a LPS core. The method can also be used in V. cholerae **vaccines**.

L9 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1992:505707 CAPLUS

DN 117:105707

TI Modified transposons for insertion of cloned sequences into prokaryotic chromosomes

IN Brey, Robert Newton, III; Deich, Robert Allen

PA American Cyanamid Co., USA

SO Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 485701	A1	19920520	EP 1991-114668	19910830
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2052324	AA	19920329	CA 1991-2052324	19910926
	FI 9104565	A	19920329	FI 1991-4565	19910927
	NO 9103814	A	19920330	NO 1991-3814	19910927
	AU 9184834	A1	19920402	AU 1991-84834	19910927
	AU 653362	B2	19940929		
	JP 05076376	A2	19930330	JP 1991-274964	19910927
PRAI	US 1990-590364		19900928		

AB Transposons that can be used to introduce a cloned sequence into a host chromosome without introduction of the transposition machinery are described. The transposon has a selectable marker and a multicloning site flanked by a pair of inverted repeats used in the integration. The gene for the transposase under the control of an inducible promoter is adjacent to this and lies outside the integrating region. These transposons are useful for a no. of enterobacteria. These constructs were used in bacteriophage .lambda. suicide vectors for Salmonella: although capable of infecting certain strains of Salmonella they cannot replicate and the transposase activity is rapidly lost after integration. Integrants carrying a gene for the B subunit of the Escherichia coli heat-labile enterotoxin were selectable in S. typhimurium and S. typhi. The use of this method to construct a S. typhimurium expressing this gene for use in live **vaccines** is demonstrated. The gene was stably integrated into the chromosome with stability in vitro much greater than that of the plasmid-borne gene. When mice were infected with this S. typhimurium it could be recovered from 15 days post-infection with 100% of the isolates expressing the gene for toxin subunit.

L9 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1990:510481 CAPLUS

DN 113:110481

TI Fusion proteins of flagellin and heterologous epitopes and
attenuated bacteria expressing the chimeric genes as
vaccines

IN Marjarian, William Robert; Stocker, Bruce Arnold Dunbar; Newton, Salete
Maria Cardozo

PA Praxis Biologics, Inc., USA; Leland Stanford Junior University

SO PCT Int. Appl., 137 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8910967	A1	19891116	WO 1989-US1932	19890505
	W: AU, DK, FI, JP, NO				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8936979	A1	19891129	AU 1989-36979	19890505
	AU 637049	B2	19930520		
	EP 419513	A1	19910403	EP 1989-906507	19890505
	EP 419513	B1	19950426		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	JP 04502402	T2	19920507	JP 1989-505981	19890505
	JP 2793673	B2	19980903		
	AT 121782	E	19950515	AT 1989-906507	19890505
	DK 9002633	A	19910104	DK 1990-2633	19901102
	NO 9004806	A	19910103	NO 1990-4806	19901105
	US 6130082	A	20001010	US 1992-837668	19920214
PRAI	US 1988-190570	A	19880505		
	US 1989-348430	B1	19890505		
	WO 1989-US1932	A	19890505		

AB Fusion proteins of flagellin and an antigenic epitope prepd. by expression of the chimeric gene are used as **vaccines**. Similarly, the bacterium expressing the chimeric gene is also used in **vaccines**. Vertebrate hosts can be immunized by administering an invasive, but **attenuated**, bacterium that is transfected with a recombinant DNA encoding the fusion protein to elicit cellular or humoral immune response. Expression of heterologous parasitic, bacterial, and viral epitopes, e.g. malarial circumsporozoite protein antigen, the B subunit of cholera toxin, the epitope of the CRM197 protein (residues 366-383; a mutant or Diphtheria toxin) hepatitis B virus surface antigen, and rotavirus VP7 antigen, with Salmonella flagellin in **attenuated** Salmonella were demonstrated and their immunogenicity obsd.

L9 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2002 ACS

AN 1974:503009 CAPLUS

DN 81:103009

TI Effect of antityphoparatyphoid **vaccines** and diphtheria and tetanus anatoxins on the activity of six liver microsomal glycosyltransferases in a cell-free system

AU Peschard, Marie J.; Louisot, Pierre

CS Lab. Biochim., Univ. Lyon, Oullins, Fr.

SO C. R. Acad. Sci., Ser. D (1974), 278(12), 1637-40

CODEN: CHDDAT

DT Journal

LA French

AB The influence of antityphoparatyphoid **vaccine** and diphtheria and tetanus anatoxins on the 6 principal hepatic glycosyltransferase activities (N-acetylglucosaminyl transferase, N-acetylgalactosaminyl transferase (I), galactosyl transferase (II), fucosyl transferase, sialyl transferase, and mannosyl transferase (III)) was studied in healthy mice

and mice secondarily infected with an equine Myxovirus. The infection caused hyperactivity of all but III in an in vitro cell-free system using liver microsomes. Injection of TAB **vaccine** caused a hyperactivity of all the enzymes. Injection of DT anatoxin had little effect on the enzymes except that the activity of III was reduced by half. Injection of DT-TAB had little effect except for increasing the glycosyltransferases responsible for placement of the terminal sugars of carbohydrate chains of glycoproteins (galactose, fucose, and sialic acid). Injection of TAB 48 hr or 96 hr before infection **attenuated** the postinfection hyperglycosylation reaction normally obsd. with all sugars except mannose. Injection of DT anatoxin 48 or 96 hr before infection did not modify the postinfection hyperglycosylation reaction except for increasing I and II. Injection of DT-TAB caused no postinfection hypergalactosylation but did cause a hypersialylation.

L9 ANSWER 11 OF 20 MEDLINE
 AN 92016970 MEDLINE
 DN 92016970 PubMed ID: 1681365
 TI Oral immunisation against typhoid fever in Indonesia with Ty21a **vaccine**.
 CM Comment in: Lancet. 1992 Feb 8;339(8789):363-4
 AU Simanjuntak C H; Paleologo F P; Punjabi N H; Darmowigoto R; Soeprawoto; Totosudirjo H; Haryanto P; Suprijanto E; Witham N D; Hoffman S L
 CS Center for Infectious Diseases Research, National Institutes of Health Research and Development, Jakarta, Indonesia.
 SO LANCET, (1991 Oct 26) 338 (8774) 1055-9.
 CY ENGLAND: United Kingdom
 DT (CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 (RANDOMIZED CONTROLLED TRIAL)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199111
 ED Entered STN: 19920124
 Last Updated on STN: 19970203
 Entered Medline: 19911121
 AB When tested under conditions of moderate transmission of typhoid fever, a liquid formulation of the oral typhoid fever **vaccine** Ty21a had a protective efficacy of 96% in Egypt, and an enteric coated capsule formulation had an efficacy of 67% in Chile. We compared the two formulations under conditions of intense transmission of typhoid fever in Indonesia in a randomised, double-blind trial. 20,543 subjects (age range 3-44 years) received either three doses of enteric coated capsules containing placebo or live Ty21a, or three doses of lyophilised placebo or live Ty21a reconstituted with phosphate buffer. During 30 months of follow-up, the rate of blood-culture-positive typhoid fever among controls was 810/100,000 per year. Rates of typhoid fever were 379/100,000 per year for subjects who received the liquid formulation of **vaccine** and 468/100,000 per year for subjects who received enteric coated capsules. The protective efficacies of the liquid and enteric coated formulations were 53% and 42%, respectively. Neither formulation protected against infection with **Salmonella paratyphi** A. No major side-effects were noted, but the overall incidence of side-effects was greater in the **vaccine** groups. Under conditions of intense transmission, Ty21a protected against typhoid fever; however, because Ty21a will not protect all individuals, there is a need for additional approaches to prevent the disease.

L9 ANSWER 12 OF 20 USPATFULL
 AN 2002:48258 USPATFULL
 TI 26 Human secreted proteins
 IN Ruben, Steven M., Olney, MD, UNITED STATES
 Birse, Charles E., North Potomac, MD, UNITED STATES

Duan, Roxanne D., Bethesda, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Olsen, Henrik, Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Ni, Jian, Rockville, MD, UNITED STATES
Young, Paul, Gaithersburg, MD, UNITED STATES

PI US 2002028449 A1 20020307

AI US 2000-726643 A1 20001201 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US15187, filed on 2 Jun 2000, UNKNOWN

PRAI US 1999-137725P 19990607 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 20287

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L9 ANSWER 13 OF 20 USPATFULL

AN 2002:43671 USPATFULL

TI 49 human secreted proteins

IN Moore, Paul A., Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Endress, Gregory A., Potomac, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Komatsoulis, George, Silver Spring, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES

PI US 2002026040 A1 20020228

AI US 2001-904615 A1 20010716 (9)

RLI Continuation of Ser. No. US 2000-739254, filed on 19 Dec 2000, PENDING
Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED
Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999, UNKNOWN

PRAI US 1998-97917P 19980825 (60)

US 1998-98634P 19980831 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 19401

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells,

antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L9 ANSWER 14 OF 20 USPATFULL
AN 2002:43187 USPATFULL
TI Transforming growth factor alpha HIII
IN Wei, Ying-Fei, Berkeley, CA, UNITED STATES
PI US 2002025553 A1 20020228
AI US 2000-726348 A1 20001201 (9)
RLI Continuation-in-part of Ser. No. US 1997-778545, filed on 3 Jan 1997, PENDING
PRAI US 1996-11136P 19960104 (60)
US 1999-168387P 19991202 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 25
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 11810
AB The present invention relates to a novel human protein called Transforming Growth Factor Alpha III, and isolated polynucleotides encoding this protein. Also provided are vectors, host cells, antibodies, and recombinant methods for producing this human protein. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to this novel human protein.

L9 ANSWER 15 OF 20 USPATFULL
AN 2002:22131 USPATFULL
TI 18 Human secreted proteins
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002012966 A1 20020131
AI US 2001-768826 A1 20010125 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US22350, filed on 15 Aug 2000, UNKNOWN
PRAI US 1999-148759P 19990816 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 18157

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L9 ANSWER 16 OF 20 USPATFULL
AN 2002:12261 USPATFULL
TI Uteroglobin-like polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002006640 A1 20020117
AI US 2001-846258 A1 20010502 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000,
UNKNOWN
PRAI US 1999-163395P 19991104 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 12076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human uteroglobin-like polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human uteroglobin-like polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human uteroglobin-like polypeptides.

L9 ANSWER 17 OF 20 USPATFULL

AN 2002:8489 USPATFULL

TI Retinoid receptor interacting polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002004489 A1 20020110

AI US 2001-788600 A1 20010221 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000,
UNKNOWN

PRAI US 1999-148757P 19990816 (60)

US 2000-189026P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11257

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human RIP polypeptides and isolated nucleic acids containing the coding regions of the genes encoding such polypeptides. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human RIP polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human RIP polypeptides.

L9 ANSWER 18 OF 20 USPATFULL

AN 2001:155766 USPATFULL

TI 49 human secreted proteins

IN Moore, Paul A., Germantown, MD, United States

Ruben, Steven M., Oley, MD, United States

Olsen, Henrik S., Gaithersburg, MD, United States

Shi, Yanggu, Gaithersburg, MD, United States

Rosen, Craig A., Laytonsville, MD, United States

Florence, Kimberly A., Rockville, MD, United States

Soppet, Daniel R., Centreville, VA, United States

Lafleur, David W., Washington, DC, United States

Endress, Gregory A., Potomac, MD, United States

Ebner, Reinhard, Gaithersburg, MD, United States

Komatsoulis, George, Silver Spring, MD, United States

Duan, Roxanne D., Bethesda, MD, United States

PI US 2001021700 A1 20010913
AI US 2000-739254 A1 20001219 (9)
RLI Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED
Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999,
UNKNOWN
PRAI US 1998-97917P 19980825 (60)
US 1998-98634P 19980831 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 15462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L9 ANSWER 19 OF 20 USPATFULL

AN 1998:150449 USPATFULL

TI Salmonella **vaccines**

IN Miller, Samuel I., Seattle, WA, United States

Mekalanos, John J., Cambridge, MA, United States

PA The General Hospital Corporation, Boston, MS, United States (U.S. corporation)

President and Fellows of Harvard College, Cambridge, MS, United States (U.S. corporation)

PI US 5843426 19981201

AI US 1995-565861 19951201 (8)

RLI Continuation-in-part of Ser. No. US 1994-271354, filed on 6 Jul 1994, now patented, Pat. No. US 5695983 which is a continuation-in-part of Ser. No. US 1993-90526, filed on 9 Jul 1993, now patented, Pat. No. US 5599537 which is a continuation-in-part of Ser. No. US 1990-629602, filed on 18 Dec 1990, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: LeGuvader, John L.; Assistant Examiner: Brusca, John S.

LREP Fish & Richardson P.C.

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN 25 Drawing Figure(s); 20 Drawing Page(s)

LN.CNT 4505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention features a Salmonella cell the virulence of which is **attenuated** by a deletion of a portion of the PhoQ gene and Salmonella cells having a deletion of the PhoQ gene and a deletion of the PhoP gene. The invention also features **vaccines** comprising such bacteria.

L9 ANSWER 20 OF 20 USPATFULL

AN 97:115147 USPATFULL

TI Salmonella **vaccines**

IN Miller, Samuel I., Brookline, MA, United States

Mekalanos, John J., Cambridge, MA, United States

PA The General Hospital Corporation, Boston, MA, United States (U.S. corporation)

President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

PI US 5695983 19971209
AI US 1994-271354 19940706 (8)
RLI Continuation-in-part of Ser. No. US 1993-90526, filed on 9 Jul 1993, now
patented, Pat. No. US 5599537 which is a continuation-in-part of Ser.
No. US 1990-629602, filed on 18 Dec 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ketter, James; Assistant Examiner: Brusca, John S.
LREP Fish & Richardson P.C.
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 25 Drawing Figure(s); 20 Drawing Page(s)
LN.CNT 3780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A bacterial cell the virulence of which is attentuated by a first
mutation in a PhoP regulon and a second mutation in an aromatic amino
acid synthetic gene and bacterial cells the virulence of which is
attenuated by a mutation in one or more PhoP-activated genes or
one or more PhoP-repressed genes.

=>

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
USPATFULL, JAPIO' ENTERED AT 13:19:44 ON 25 MAR 2002

L3	18266 S SALMONELLA TYPHI
L4	3872 S SALMONELLA PARATYPHI
L5	1557 S L3 AND L4
L6	135 S L5 AND VACCINE?
L7	114 DUP REM L6 (21 DUPLICATES REMOVED)
L8	8 S L7 AND ADJUVANT
L9	20 S L6 AND ATTENUATED

10 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:252767 CAPLUS
DOCUMENT NUMBER: 118:252767
TITLE: Live attenuated **salmonellae**: Oral vaccines
for salmonellosis and combined vaccines carrying
heterologous antigens
AUTHOR(S): Hormaeche, Carlos E.; Dougan, Gordon; Chatfield, Steve
N.
CORPORATE SOURCE: Div. Microbiol. Parasitol., Dep. Pathol., Cambridge,
CB2 1QP, UK
SOURCE: FEMS Symp. (1992), 63 (Release of Genetically Modified
Microorganisms--REGEM 2), 71-83
CODEN: FEMSDW; ISSN: 0163-9188
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

L10 ANSWER 2 OF 6 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 91278636 EMBASE
DOCUMENT NUMBER: 1991278636
TITLE: Live attenuated **salmonella vaccines** and
their potential as oral combined vaccines carrying
heterologous antigens.
AUTHOR: Hormaeche C.E.
CORPORATE SOURCE: Div. Microbiology/Parasitology, Department of Pathology,
Tennis Court Road, Cambridge CB2 1LP, United Kingdom
SOURCE: Journal of Immunological Methods, (1991) 142/1 (113-120).
ISSN: 0022-1759 CODEN: JIMMBG
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 3 OF 6 LIFESCI COPYRIGHT 2002 CSA
ACCESSION NUMBER: 94:28626 LIFESCI
TITLE: Live attenuated **Salmonella vaccines** and
their potential as oral combined vaccines carrying
heterologous antigens
AUTHOR: Hormaeche, C.E.
CORPORATE SOURCE: Div. Microbiol. and Parasitol., Dep. Pathol., Tennis Court
Rd., Cambridge CB2 1LP, UK
SOURCE: J. IMMUNOL. METHODS, (1991) vol. 142, no. 1, pp. 113-120.
ISSN: 0022-1759.
DOCUMENT TYPE: Journal
FILE SEGMENT: F; J
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 4 OF 6 MEDLINE
ACCESSION NUMBER: 92013164 MEDLINE
DOCUMENT NUMBER: 92013164 PubMed ID: 1919015
TITLE: Live attenuated **Salmonella vaccines** and
their potential as oral combined vaccines carrying
heterologous antigens.
AUTHOR: Hormaeche C E
CORPORATE SOURCE: Department of Pathology, Cambridge, U.K.
SOURCE: JOURNAL OF IMMUNOLOGICAL METHODS, (1991 Aug 28) 142 (1)
113-20. Ref: 92
Journal code: IFE; 1305440. ISSN: 0022-1759.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

(REVIEW, ACADEMIC)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199111
 ENTRY DATE: Entered STN: 19920124
 Last Updated on STN: 19920124
 Entered Medline: 19911112

L10 ANSWER 5 OF 6 SCISEARCH COPYRIGHT 2002 ISI (R)
 ACCESSION NUMBER: 91:502382 SCISEARCH
 THE GENUINE ARTICLE: GD761
 TITLE: LIVE ATTENUATED **SALMONELLA VACCINES**
 AND THEIR POTENTIAL AS ORAL COMBINED VACCINES CARRYING
 HETEROLOGOUS ANTIGENS
 AUTHOR: HORMAECHE C E (Reprint)
 CORPORATE SOURCE: DEPT PATHOL, DIV MICROBIOL & PARASITOL, TENNIS COURT RD,
 CAMBRIDGE CB2 1LP, ENGLAND (Reprint)
 COUNTRY OF AUTHOR: ENGLAND
 SOURCE: JOURNAL OF IMMUNOLOGICAL METHODS, (1991) Vol. 142, No. 1,
 pp. 113-120.
 DOCUMENT TYPE: Article; Journal
 FILE SEGMENT: LIFE
 LANGUAGE: ENGLISH
 REFERENCE COUNT: 92
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 6 OF 6 USPATFULL
 ACCESSION NUMBER: 2001:155455 USPATFULL
 TITLE: **Salmonella** vaccine
 INVENTOR(S): Nuijten, Petrus Johannes Maria, Boxmeer, Netherlands
 Witvliet, Maarten Hendrik, Oostrum, Netherlands

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021386	A1	20010913
APPLICATION INFO.:	US 2000-749025	A1	20001227 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-204564	19991228
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	William M. Blackstone, Akzo nobel Patent Department, Suite 206, 1300 Piccard Drive, Rockville, MD, 20850	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	745	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

=>

L10 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS

AB A review with 114 refs. Live attenuated **salmonellae** are protective, and are candidate vaccines against invasive **Salmonella** infections in man and animals. Different attenuating **mutations** have been described, and more than one can be incorporated in a vaccine for added safety. Combined **Salmonella vaccines** express target carbohydrate and protein antigens or epitopes from viruses, bacteria and eukaryotic parasites, either within or on the surface of the cell, as capsules, fimbriae, or in the **flagellin**. Humoral, secretory, and cellular responses to the recombinant antigens have been demonstrated. Exptl. protection against diseases including streptococcal infection, tetanus, influenza and malaria has been obtained, and such hybrid strains may offer important advances in immunization against infectious diseases.

AN 1993:252767 CAPLUS

DN 118:252767

TI Live attenuated **salmonellae**: Oral vaccines for salmonellosis and combined vaccines carrying heterologous antigens

AU Hormaeche, Carlos E.; Dougan, Gordon; Chatfield, Steve N.

CS Div. Microbiol. Parasitol., Dep. Pathol., Cambridge, CB2 1QP, UK

SO FEMS Symp. (1992), 63(Release of Genetically Modified Microorganisms--REGEN 2), 71-83

CODEN: FEMSDW; ISSN: 0163-9188

DT Journal; General Review

LA English

L10 ANSWER 2 OF 6 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

AB Live attenuated **salmonellae** are protective, and are candidate vaccines against invasive **salmonella** infections in man and animals. Different attenuating **mutations** have been described, and more than one can be incorporated in a vaccine for added safety.

~~Combined **salmonella vaccines** express target~~
carbohydrate and protein antigens or epitopes from viruses, bacteria and eukaryotic parasites, either within or on the surface of the cell, as capsules, fimbriae, or in the **flagellin**. Humoral, secretory and cellular responses to the recombinant antigens has been demonstrated. Experimental protection against diseases including streptococcal infection, tetanus, influenza and malaria has been obtained.

AN 91278636 EMBASE

DN 1991278636

TI Live attenuated **salmonella vaccines** and their potential as oral combined vaccines carrying heterologous antigens.

AU Hormaeche C.E.

CS Div. Microbiology/Parasitology, Department of Pathology, Tennis Court Road, Cambridge CB2 1LP, United Kingdom

SO Journal of Immunological Methods, (1991) 142/1 (113-120).

ISSN: 0022-1759 CODEN: JIMMBG

CY Netherlands

DT Journal; Article

FS 004 Microbiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LA English

SL English

L10 ANSWER 3 OF 6 LIFESCI COPYRIGHT 2002 CSA

AB Live attenuated **salmonellae** are protective, and are candidate vaccines against invasive **Salmonella** infections in man and animals. Different attenuating **mutations** have been described, and more than one can be incorporated in a vaccine for added safety. Combined **Salmonella vaccines** express target carbohydrate and protein antigens or epitopes from viruses, bacteria and eukaryotic parasites, either within or on the surface of the cell, as capsules, fimbriae, or in the **flagellin**. Humoral, secretory and

cellular responses to the recombinant antigens has been demonstrated. Experimental protection against disease including streptococcal infection, tetanus, influenza and malaria has been obtained.

AN 94:28626 LIFESCI
TI Live attenuated **Salmonella vaccines** and their
potential as oral combined vaccines carrying heterologous antigens
AU Hormaeche, C.E.
CS Div. Microbiol. and Parasitol., Dep. Pathol., Tennis Court Rd., Cambridge
CB2 1LP, UK
SO J. IMMUNOL. METHODS, (1991) vol. 142, no. 1, pp. 113-120.
ISSN: 0022-1759.
DT Journal
FS F; J
LA English
SL English

L10 ANSWER 4 OF 6 MEDLINE

AB Live attenuated **salmonellae** are protective, and are candidate vaccines against invasive **salmonella** infections in man and animals. Different attenuating **mutations** have been described, and more than one can be incorporated in a vaccine for added safety. Combined **salmonella vaccines** express target carbohydrate and protein antigens or epitopes from viruses, bacteria and eukaryotic parasites, either within or on the surface of the cell, as capsules, fimbriae, or in the **flagellin**. Humoral, secretory and cellular responses to the recombinant antigens has been demonstrated. Experimental protection against diseases including streptococcal infection, tetanus, influenza and malaria has been obtained.

AN 92013164 MEDLINE
DN 92013164 PubMed ID: 1919015
TI Live attenuated **Salmonella vaccines** and their
potential as oral combined vaccines carrying heterologous antigens.
AU Hormaeche C E
CS Department of Pathology, Cambridge, U.K.
SO JOURNAL OF IMMUNOLOGICAL METHODS, (1991 Aug 28) 142 (1) 113-20. Ref: 92
Journal code: IFE; 1305440. ISSN: 0022-1759.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LA English
FS Priority Journals
EM 199111
ED Entered STN: 19920124
Last Updated on STN: 19920124
Entered Medline: 19911112

L10 ANSWER 5 OF 6 SCISEARCH COPYRIGHT 2002 ISI (R)

AB Live attenuated **salmonellae** are protective, and are candidate vaccines against invasive **salmonella** infections in man and animals. Different attenuating **mutations** have been described, and more than one can be incorporated in a vaccine for added safety. Combined **salmonella vaccines** express target carbohydrate and protein antigens or epitopes from viruses, bacteria and eukaryotic parasites, either within or on the surface of the cell, as capsules, fimbriae, or in the **flagellin**. Humoral, secretory and cellular responses to the recombinant antigens has been demonstrated. Experimental protection against diseases including streptococcal infection, tetanus, influenza and malaria has been obtained.

AN 91:502382 SCISEARCH
GA The Genuine Article (R) Number: GD761
TI LIVE ATTENUATED **SALMONELLA VACCINES** AND THEIR
POTENTIAL AS ORAL COMBINED VACCINES CARRYING HETEROLOGOUS ANTIGENS
AU HORMAECH C E (Reprint)

CS DEPT PATHOL, DIV MICROBIOL & PARASITOL, TENNIS COURT RD, CAMBRIDGE CB2
1LP, ENGLAND (Reprint)

CYA ENGLAND

SO JOURNAL OF IMMUNOLOGICAL METHODS, (1991) Vol. 142, No. 1, pp. 113-120.

DT Article; Journal

FS LIFE

LA ENGLISH

REC Reference Count: 92

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 6 OF 6 USPATFULL

AB The present invention relates to **Salmonella** bacteria for use
as a vaccine. The invention also relates to vaccines based thereon that
are useful for the prevention of microbial pathogenesis. Further, the
invention relates to the use of such bacteria or the manufacture of such
vaccines. Finally, the invention relates to methods for the preparation
of such vaccines.

AN 2001:155455 USPATFULL

TI **Salmonella** vaccine

IN Nuijten, Petrus Johannes Maria, Boxmeer, Netherlands
Witvliet, Maarten Hendrik, Oostrum, Netherlands

PI US 2001021386 A1 20010913

AI US 2000-749025 A1 20001227 (9)

PRAI EP 1999-204564 19991228

DT Utility

FS APPLICATION

LREP William M. Blackstone, Akzo nobel Patent Department, Suite 206, 1300
Piccard Drive, Rockville, MD, 20850

CLMN Number of Claims: 13

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 745

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

L7 ANSWER 1 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 1994:226104 BIOSIS
 DOCUMENT NUMBER: PREV199497239104
 TITLE: Hypervariable region IV of **Salmonella** gene fliC-d encodes a dominant surface epitope and a stabilizing factor for functional **flagella**.
 AUTHOR(S): He, Xiao-Song; Rivkina, Marianne; Stocker, Bruce A. D.; Robinson, William S. (1)
 CORPORATE SOURCE: (1) Dep. Med., Stanford Univ. Sch. Med., Stanford, CA 94305 USA
 SOURCE: Journal of Bacteriology, (1994) Vol. 176, No. 8, pp. 2406-2414.
 ISSN: 0021-9193.
 DOCUMENT TYPE: Article
 LANGUAGE: English

L7 ANSWER 2 OF 21 USPATFULL
 ACCESSION NUMBER: 2002:19176 USPATFULL
 TITLE: Method of detecting shigella and shigella mxim DNA
 INVENTOR(S): Schuch, Raymond, Washington, DC, United States
 Sandlin, Robin C., Columbia, MD, United States
 Maurelli, Anthony T., Silver Spring, MD, United States
 PATENT ASSIGNEE(S): The Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6342352	B1	20020129
APPLICATION INFO.:	US 1999-296670		19990422 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-82944P	19980424 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Devi, S.	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	2019	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 21 USPATFULL
 ACCESSION NUMBER: 2001:155455 USPATFULL
 TITLE: **Salmonella** vaccine
 INVENTOR(S): Nuijten, Petrus Johannes Maria, Boxmeer, Netherlands
 Witvliet, Maarten Hendrik, Oostrum, Netherlands

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021386	A1	20010913
APPLICATION INFO.:	US 2000-749025	A1	20001227 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-204564	19991228
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	William M. Blackstone, Akzo nobel Patent Department, Suite 206, 1300 Piccard Drive, Rockville, MD, 20850	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	

NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 745
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 21 USPATFULL

ACCESSION NUMBER: 2001:40233 USPATFULL
TITLE: 66 kDa antigen from Borrelia
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, Irvine, CA, United States
PATENT ASSIGNEE(S): Symbicom Aktiebolag, Umea, Sweden (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6204018	B1	20010320
	WO 9535379		19951228
APPLICATION INFO.:	US 1997-750494		19970612 (8)
	WO 1995-US7665		19950619
			19970612 PCT 371 date
			19970612 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-262220, filed on 20 Jun 1994, now patented, Pat. No. US 6054296		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Minnifield, Nita M.		
LEGAL REPRESENTATIVE:	Frommer Lawrence & Haug LLP, Frommer, William S., Kolawski, Thomas J.		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	2159		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L7 ANSWER 5 OF 21 USPATFULL

ACCESSION NUMBER: 2001:25436 USPATFULL
TITLE: Attenuated mutants of **salmonella** which
constitutively express the Vi antigen
INVENTOR(S): Noriega, Fernando R., Baltimore, MD, United States
Sztein, Marcelo B., Columbia, MD, United States
Levine, Myron M., Columbia, MD, United States
PATENT ASSIGNEE(S): University of Maryland, Baltimore, Baltimore, MD,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6190669	B1	20010220
APPLICATION INFO.:	US 1998-76761		19980513 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Duffy, Patricia A.		
LEGAL REPRESENTATIVE:	Sughrue, Mion, Zinn Macpeak & Seas. PLLC		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	1873		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L7 ANSWER 6 OF 21 USPATFULL

ACCESSION NUMBER: 2001:25429 USPATFULL
TITLE: Materials and methods relating to the attachment and
display of substances on cell surfaces
INVENTOR(S): Steidler, Lothar, Ghent, Belgium
Remaut, Erik, Ghent, Belgium
Wells, Jeremy Mark, Cambridge, United Kingdom

PATENT ASSIGNEE(S): Vlaams Interuniversitair Instituut voor Biotechnologie
(VIB) vzw, Zwijnaarde, Belgium (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6190662	B1	20010220
APPLICATION INFO.:	US 1998-36609		19980306 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1996-GB2195, filed on 6 Sep 1996		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-18323	19950907
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Navarro, Albert	
LEGAL REPRESENTATIVE:	Pennie & Edmonds LLP	
NUMBER OF CLAIMS:	24	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 7 Drawing Page(s)	
LINE COUNT:	964	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 7 OF 21 USPATFULL

ACCESSION NUMBER: 2000:134749 USPATFULL
TITLE: Recombinant flagellin **vaccines**
INVENTOR(S): Majarian, William R., Mt. Royal, NJ, United States
Stocker, Bruce A. D., Palo Alto, CA, United States
Newton, Salete M. C., Mountain View, CA, United States
PATENT ASSIGNEE(S): American Cyanamid Company, Madison, NJ, United States
(U.S. corporation)
The Board of Trustees of the Leland Stanford Junior University, Stanford, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6130082		20001010
APPLICATION INFO.:	US 1992-837668		19920214 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-348430, filed on 5 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-190570, filed on 5 May 1988, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Mosher, Mary E.		
LEGAL REPRESENTATIVE:	Hamilton, Brook, Smith & Reynolds, P.C.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 17 Drawing Page(s)		
LINE COUNT:	2404		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 8 OF 21 USPATFULL

ACCESSION NUMBER: 2000:91741 USPATFULL
TITLE: 66 kDa antigen from *Borrelia*
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, San Antonio, TX, United States
PATENT ASSIGNEE(S): Symbicom AB, Umea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6090586		20000718
APPLICATION INFO.:	US 1995-468878		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-262220, filed on 20 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Housel, James C.
 ASSISTANT EXAMINER: Ryan, V.
 LEGAL REPRESENTATIVE: Frommer, Esq., William S., Kowalski, Esq., Thomas J. Frommer Lawrence & Haug LLP

NUMBER OF CLAIMS: 21
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 11 Drawing Figure(s); 5 Drawing Page(s)
 LINE COUNT: 3064
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 9 OF 21 USPATFULL

ACCESSION NUMBER: 2000:67433 USPATFULL
 TITLE: 66 kDa antigen from Borrelia
 INVENTOR(S): Bergstrom, Sven, Umea, Sweden
 Barbour, Alan George, San Antonio, TX, United States
 PATENT ASSIGNEE(S): Symbicom AB, Ulmea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6068842		20000530
APPLICATION INFO.:	US 1995-471733		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-262220, filed on 20 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Housel, James C.		
ASSISTANT EXAMINER:	Ryan, V.		
LEGAL REPRESENTATIVE:	Frommer, Esq., William S., Kowalski, Esq., Thomas J. Frommer Lawrence & Haug LLP		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	3138		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L7 ANSWER 10 OF 21 USPATFULL

ACCESSION NUMBER: 2000:50546 USPATFULL
 TITLE: 66 kDa antigen from Borrelia
 INVENTOR(S): Bergstrom, Sven, Umea, Sweden
 Barbour, Alan George, San Antonio, TX, United States
 PATENT ASSIGNEE(S): Symbicom AB, Umea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6054296		20000425
APPLICATION INFO.:	US 1994-262220		19940620 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of		

Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1988-5902	19881024
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Housel, James C.	
ASSISTANT EXAMINER:	Ryan, V.	
LEGAL REPRESENTATIVE:	Frommer, Esq., William S., Kowalski, Esq., Thomas J. Frommer Lawrence & Haug LLP	
NUMBER OF CLAIMS:	32	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	3433	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 11 OF 21 USPATFULL

ACCESSION NUMBER: 1999:27448 USPATFULL
TITLE: Methods and compositions for the preparation of recombinant Trichomonas vaginalis proteins and peptides
INVENTOR(S): Alderete, John F., San Antonio, TX, United States
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5876985		19990302
APPLICATION INFO.:	US 1994-259966		19940614 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-692382, filed on 25 Apr 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Patterson, Jr., Charles L.		
ASSISTANT EXAMINER:	Moore, William W.		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	21		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 12 Drawing Page(s)		
LINE COUNT:	2363		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 12 OF 21 USPATFULL

ACCESSION NUMBER: 1999:1223 USPATFULL
TITLE: Avirulent microbes and uses therefor
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
Kelly, Sandra M., St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5855880		19990105
APPLICATION INFO.:	US 1996-596732		19960205 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-209542, filed on 10 Mar 1994 which is a continuation-in-part of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -200934 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which		

is a continuation-in-part of Ser. No. US 1987-106072,
 filed on 7 Oct 1987, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Scheiner, Laurie
 LEGAL REPRESENTATIVE: Howell & Haferkamp, L.C.
 NUMBER OF CLAIMS: 9
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
 LINE COUNT: 3409
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 13 OF 21 USPATFULL
 ACCESSION NUMBER: 1999:1222 USPATFULL
 TITLE: Avirulent microbes and uses therefor
 INVENTOR(S): Curtiss III, Roy, St. Louis, MO, United States
 PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5855879		19990105
APPLICATION INFO.:	US 1994-209542		19940310 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1991-785748, filed on 7 Nov 1991, now patented, Pat. No. US 5294441 which is a continuation-in-part of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -612001 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Laurie		
LEGAL REPRESENTATIVE:	Howell & Haferkamp, L.C.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	3399		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L7 ANSWER 14 OF 21 USPATFULL
 ACCESSION NUMBER: 1998:115424 USPATFULL
 TITLE: **Vaccines** containing bacteria attenuated by mutations in two genes of the aromatic amino acid biosynthetic pathway
 INVENTOR(S): Dougan, Gordon, Beckenham, United Kingdom
 Chatfield, Steven Neville, Beckenham, United Kingdom
 Hormaeche, Carlos Estenio, Cambridge, United Kingdom
 PATENT ASSIGNEE(S): Glaxo Wellcome, Inc., Research Triangle Park, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5811105		19980922
APPLICATION INFO.:	US 4492978		19950524 (8)
DISCLAIMER DATE:	20180623		
RELATED APPLN. INFO.:	Division of Ser. No. 135436, filed on 13 Oct 1993, now abandoned which is a continuation of Ser. No. 979460, filed on 20 Nov 1992, now abandoned which is a		

continuation of Ser. No. 857092, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. 642138, filed on 15 Jan 1991, now abandoned which is a continuation of Ser. No. 399539, filed on 22 Aug 1989, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	GB 8730037	19871223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Minnifield, Nita	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye, P.C.	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	628	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 15 OF 21 USPATFULL

ACCESSION NUMBER: 1998:72257 USPATFULL

TITLE: **Vaccines containing salmonella**
bacteria attenuated by mutations in two genes of the aromatic amino acid biosynthetic pathway

INVENTOR(S): Dougan, Gordon, Beckenham, United Kingdom
Chatfield, Steven Neville, Beckenham, United Kingdom
Hormaeche, Carlos Estenio, Cambridge, United Kingdom

PATENT ASSIGNEE(S): Glaxo Wellcome, Inc., Research Triangle Park, NC,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5770214		19980623
APPLICATION INFO.:	US 1995-484314		19950607 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-135436, filed on 13 Oct 1993, now abandoned which is a continuation of Ser. No. US 1992-979460, filed on 20 Nov 1992, now abandoned which is a continuation of Ser. No. US 1992-857092, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. US 1991-642138, filed on 15 Jan 1991, now abandoned which is a continuation of Ser. No. US 1989-399539, filed on 22 Aug 1989, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1987-30037	19871223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Minnifield, Nita	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye, P.C.,	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	599	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 16 OF 21 USPATFULL

ACCESSION NUMBER: 97:123350 USPATFULL

TITLE: Nucleic acid encoding helicobacter pylori enolase

INVENTOR(S): Thompson, Stuart A., Joelton, TN, United States
Blaser, Martin J., Nashville, TN, United States

PATENT ASSIGNEE(S): Vanderbilt University, Nashville, TN, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5703219		19971230
APPLICATION INFO.:	US 1995-446920		19950522 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-215928, filed on 21 Mar 1994, now patented, Pat. No. US 5434253, issued on 18 Jul 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Lau, Kawai		
LEGAL REPRESENTATIVE:	Needle & Rosenberg, PC		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1485		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 17 OF 21 USPATFULL
 ACCESSION NUMBER: 97:70928 USPATFULL
 TITLE: Recombinant avirulent **salmonella** antifertility **vaccines**
 INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
 Tung, Kenneth S. K., Charlottesville, VA, United States
 PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5656488		19970812
APPLICATION INFO.:	US 1994-222182		19940401 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-791347, filed on 18 Nov 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-615720, filed on 21 Nov 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Cunningham, Thomas M.		
LEGAL REPRESENTATIVE:	Howell & Haferkamp, L.C.		
NUMBER OF CLAIMS:	50		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	23 Drawing Figure(s); 20 Drawing Page(s)		
LINE COUNT:	3112		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 18 OF 21 USPATFULL
 ACCESSION NUMBER: 97:47098 USPATFULL
 TITLE: Method of detecting ligand interactions
 INVENTOR(S): McCoy, John M., Reading, MA, United States
 Lu, Zhijian, Arlington, MA, United States
 PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5635182		19970603
APPLICATION INFO.:	US 1994-260582		19940616 (8)
DISCLAIMER DATE:	20101214		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Bugalsky, Gabriele E.		
LEGAL REPRESENTATIVE:	Meinert, M. C.		
NUMBER OF CLAIMS:	28		

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1935
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 19 OF 21 USPATFULL

ACCESSION NUMBER: 95:11759 USPATFULL
TITLE: Avirulent microbes and uses therefor:
Salmonella typhi
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
Kelly, Sandra M., St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5387744		19950207
APPLICATION INFO.:	US 1993-88394		19930707 (8)
DISCLAIMER DATE:	20110315		
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-975892, filed on 13 Nov 1992, now abandoned which is a continuation of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -612001 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Low, Christopher S. F.		
LEGAL REPRESENTATIVE:	Rogers, Howell & Haferkamp		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	2718		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 20 OF 21 USPATFULL

ACCESSION NUMBER: 94:22076 USPATFULL
TITLE: Avirulent microbes and uses therefor:
salmonella typhi
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5294441		19940315
APPLICATION INFO.:	US 1991-785748		19911107 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. 612001 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Low, Christopher S. F.
LEGAL REPRESENTATIVE: Rogers, Howell & Haferkamp
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 3370
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 21 OF 21 USPATFULL
ACCESSION NUMBER: 93:78691 USPATFULL
TITLE: Virulence associated proteins in Borrelia burgdorferi
(BB)
INVENTOR(S): Norris, Steven J., Houston, TX, United States
Barbour, Alan G., San Antonio, TX, United States
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System,
Austin, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5246844		19930921
APPLICATION INFO.:	US 1991-781355		19911022 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
ASSISTANT EXAMINER:	Dubrulle, Chris		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	1705		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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6 ANSWER 1 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 1995:315736 BIOSIS
 DOCUMENT NUMBER: PREV199598330036
 TITLE: Transepithelial Signaling to neutrophils by Salmonellae: A Novel Virulence Mechanism for Gastroenteritis.
 AUTHOR(S): McCormick, Beth A. (1); Miller, Samuel I.; Carnes, Denice; Madara, James L.
 CORPORATE SOURCE: (1) Dep. Pathol., Brigham Women's Hospital, 75 Francis St., Boston, MA 02115 USA
 SOURCE: Infection and Immunity, (1995) Vol. 63, No. 6, pp. 2302-2309.
 ISSN: 0019-9567.
 DOCUMENT TYPE: Article
 LANGUAGE: English

L16 ANSWER 2 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 ACCESSION NUMBER: 1983:291842 BIOSIS
 DOCUMENT NUMBER: BA76:49334
 TITLE: DELAYED HYPER SENSITIVITY IN MURINE SALMONELLOSIS SPECIFICITY OF FOOT PAD REACTION IN MICE INFECTED WITH ROUGH **MUTANTS** OF SALMONELLA-TYPHIMURIUM.
 AUTHOR(S): CHO N; SAITO-TAKI T; NAKANO M
 CORPORATE SOURCE: DEPARTMENT OF MICROBIOLOGY, JICHI MEDICAL SCHOOL, KAWACHI-GUN, TOCHIGI 329-04.
 SOURCE: MICROBIOL IMMUNOL, (1983) 27 (2), 167-176.
 CODEN: MIIMDV. ISSN: 0385-5600.
 FILE SEGMENT: BA; OLD
 LANGUAGE: English

L16 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1998:543176 CAPLUS
 DOCUMENT NUMBER: 129:159061
 TITLE: Salmonella lacking lipid A as a result of mutation in the msbB or htrB genes
 INVENTOR(S): Maskell, Duncan John; Dougan, Gordon
 PATENT ASSIGNEE(S): Imperial College of Science, Technology & Medicine, UK
 SOURCE: PCT Int. Appl., 39 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9833923	A1	19980806	WO 1998-GB291	19980130
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9858734	A1	19980825	AU 1998-58734	19980130
EP 973911	A1	20000126	EP 1998-902105	19980130
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI			
PRIORITY APPLN. INFO.:			GB 1997-1886	19970130
			GB 1997-1887	19970130
			WO 1998-GB291	19980130

L16 ANSWER 4 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
 ACCESSION NUMBER: 76155971 EMBASE
 DOCUMENT NUMBER: 1976155971

TITLE: Studies on the host range specificity of pyocin P1.
 AUTHOR: Brandis H.; Kraemer J.; Israil A.
 CORPORATE SOURCE: Inst. Med. Microbiol. Immunol., Bonn Univ., Bonn, Germany
 SOURCE: Archives Roumaines de Pathologie Experimentale et de
 Microbiologie, (1975) 34/1-2 (13-20).
 CODEN: APEMAR
 DOCUMENT TYPE: Journal
 FILE SEGMENT: 004 Microbiology
 LANGUAGE: English

L16 ANSWER 5 OF 26 MEDLINE
 ACCESSION NUMBER: 74061355 MEDLINE
 DOCUMENT NUMBER: 74061355 PubMed ID: 4587616
 TITLE: **Mutants** of group D1 Salmonella carrying the
 somatic antigen of group A organisms: isolation and
 serological characterization.
 AUTHOR: Uchida T; Matsumoto T; Sasaki T
 SOURCE: JOURNAL OF BACTERIOLOGY, (1974 Jan) 117 (1) 8-12.
 Journal code: HH3; 2985120R. ISSN: 0021-9193.
 PUB. COUNTRY: United States
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 197402
 ENTRY DATE: Entered STN: 19900310
 Last Updated on STN: 19900310
 Entered Medline: 19740222

L16 ANSWER 6 OF 26 USPATFULL
 ACCESSION NUMBER: 2002:48258 USPATFULL
 TITLE: 26 Human secreted proteins
 INVENTOR(S): Ruben, Steven M., Olney, MD, UNITED STATES
 Birse, Charles E., North Potomac, MD, UNITED STATES
 Duan, Roxanne D., Bethesda, MD, UNITED STATES
 Soppet, Daniel R., Centreville, VA, UNITED STATES
 Rosen, Craig A., Laytonsville, MD, UNITED STATES
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES
 LaFleur, David W., Washington, DC, UNITED STATES
 Olsen, Henrik, Gaithersburg, MD, UNITED STATES
 Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
 Florence, Kimberly A., Rockville, MD, UNITED STATES
 Ni, Jian, Rockville, MD, UNITED STATES
 Young, Paul, Gaithersburg, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002028449	A1	20020307
APPLICATION INFO.:	US 2000-726643	A1	20001201 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US15187, filed on 2 Jun 2000, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-137725P	19990607 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	20287	

L16 ANSWER 7 OF 26 USPATFULL
 ACCESSION NUMBER: 2002:43671 USPATFULL

TITLE: 49 human secreted proteins
 INVENTOR(S): Moore, Paul A., Germantown, MD, UNITED STATES
 Ruben, Steven M., Olney, MD, UNITED STATES
 Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES
 Rosen, Craig A., Laytonsville, MD, UNITED STATES
 Florence, Kimberly A., Rockville, MD, UNITED STATES
 Soppet, Daniel R., Centreville, VA, UNITED STATES
 LaFleur, David W., Washington, DC, UNITED STATES
 Endress, Gregory A., Potomac, MD, UNITED STATES
 Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
 Komatsoulis, George, Silver Spring, MD, UNITED STATES
 Duan, Roxanne D., Bethesda, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002026040	A1	20020228
APPLICATION INFO.:	US 2001-904615	A1	20010716 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-739254, filed on 19 Dec 2000, PENDING Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97917P	19980825 (60)
	US 1998-98634P	19980831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	19401	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L16 ANSWER 8 OF 26 USPATFULL

ACCESSION NUMBER: 2002:43187 USPATFULL
 TITLE: Transforming growth factor alpha HIII
 INVENTOR(S): Wei, Ying-Fei, Berkeley, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002025553	A1	20020228
APPLICATION INFO.:	US 2000-726348	A1	20001201 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-778545, filed on 3 Jan 1997, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-11136P	19960104 (60)
	US 1999-168387P	19991202 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	11810	

L16 ANSWER 9 OF 26 USPATFULL

ACCESSION NUMBER: 2002:37998 USPATFULL

TITLE: Genes identified as required for proliferation of E. coli
INVENTOR(S): Forsyth, R. Allyn, San Diego, CA, UNITED STATES
Ohlsen, Kari L., San Diego, CA, UNITED STATES
Zyskind, Judith W., La Jolla, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002022718	A1	20020221
APPLICATION INFO.:	US 2000-741669	A1	20001219 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-173005P	19991223 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660	
NUMBER OF CLAIMS:	131	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	5270	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 10 OF 26 USPATFULL
ACCESSION NUMBER: 2002:22131 USPATFULL
TITLE: 18 Human secreted proteins
INVENTOR(S): Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002012966	A1	20020131
APPLICATION INFO.:	US 2001-768826	A1	20010125 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US22350, filed on 15 Aug 2000, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-148759P	19990816 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	18157	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 11 OF 26 USPATFULL
ACCESSION NUMBER: 2002:12261 USPATFULL
TITLE: Uteroglobin-like polynucleotides, polypeptides, and antibodies
INVENTOR(S): Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002006640	A1	20020117
APPLICATION INFO.:	US 2001-846258	A1	20010502 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US30326, filed		

on 3 Nov 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-163395P	19991104 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
LINE COUNT:	12076	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L16 ANSWER 12 OF 26 USPATFULL
ACCESSION NUMBER: 2002:8489 USPATFULL
TITLE: Retinoid receptor interacting polynucleotides,
polypeptides, and antibodies
INVENTOR(S): Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002004489	A1	20020110
APPLICATION INFO.:	US 2001-788600	A1	20010221 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-148757P	19990816 (60)
	US 2000-189026P	20000314 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
LINE COUNT:	11257	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L16 ANSWER 13 OF 26 USPATFULL
ACCESSION NUMBER: 2001:155766 USPATFULL
TITLE: 49 human secreted proteins
INVENTOR(S): Moore, Paul A., Germantown, MD, United States
Ruben, Steven M., Oley, MD, United States
Olsen, Henrik S., Gaithersburg, MD, United States
Shi, Yanggu, Gaithersburg, MD, United States
Rosen, Craig A., Laytonville, MD, United States
Florence, Kimberly A., Rockville, MD, United States
Soppet, Daniel R., Centreville, VA, United States
Lafleur, David W., Washington, DC, United States
Endress, Gregory A., Potomac, MD, United States
Ebner, Reinhard, Gaithersburg, MD, United States
Komatsoulis, George, Silver Spring, MD, United States
Duan, Roxanne D., Bethesda, MD, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021700	A1	20010913
APPLICATION INFO.:	US 2000-739254	A1	20001219 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97917P	19980825 (60)
	US 1998-98634P	19980831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
LINE COUNT:	15462	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L16 ANSWER 14 OF 26 USPATFULL
 ACCESSION NUMBER: 2001:86448 USPATFULL
 TITLE: Efflux pump inhibitors
 INVENTOR(S): Chamberland, Suzanne, Los Gatos, CA, United States
 Lee, May, Los Altos, CA, United States
 Leger, Roger, Mountain View, CA, United States
 Lee, Ving J., Los Altos, CA, United States
 Renau, Thomas, Santa Clara, CA, United States
 Zhang, Zhijia J., Foster City, CA, United States
 PATENT ASSIGNEE(S): Microcide Pharmaceuticals, Inc., Mountain View, CA,
 United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6245746	B1	20010612
APPLICATION INFO.:	US 1998-20001		19980204 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-12363, filed on 23 Jan 1998, now patented, Pat. No. US 6114310		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Weddington, Kevin E.		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
LINE COUNT:	5091		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L16 ANSWER 15 OF 26 USPATFULL
 ACCESSION NUMBER: 2001:67794 USPATFULL
 TITLE: Human respiratory syncytial virus peptides with
 antifusogenic and antiviral activities
 INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
 Lambert, Dennis Michael, Cary, NC, United States
 Petteway, Stephen Robert, Cary, NC, United States
 PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6228983	B1	20010508
APPLICATION INFO.:	US 1995-485264		19950607 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Laurie		

ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 32166
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 16 OF 26 USPATFULL

ACCESSION NUMBER: 2001:40493 USPATFULL
TITLE: Peptidomimetic efflux pump inhibitors
INVENTOR(S): Leger, Roger, Mountain View, CA, United States
Lee, Ving J., Los Altos, CA, United States
She, Miles, Oakland, CA, United States
PATENT ASSIGNEE(S): Microcide Pharmaceuticals, Inc., Mountain View, CA,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6204279	B1	20010320
APPLICATION INFO.:	US 1998-89734		19980603 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Lee, Howard C.		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
LINE COUNT:	3003		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 17 OF 26 USPATFULL

ACCESSION NUMBER: 2000:121286 USPATFULL
TITLE: Bioluminescent bioreporter integrated circuit
INVENTOR(S): Simpson, Michael L., Knoxville, TN, United States
Sayler, Gary S., Blaine, TN, United States
Paulus, Michael J., Knoxville, TN, United States
PATENT ASSIGNEE(S): UT Battelle, LLC, Oak Ridge, TX, United States (U.S.
corporation)
The University of Tennessee Research Corp., Knoxville,
TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6117643		20000912
APPLICATION INFO.:	US 1997-978439		19971125 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Chin, Christopher L.		
LEGAL REPRESENTATIVE:	Williams, Morgan & Amerson, P.C.		
NUMBER OF CLAIMS:	32		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	43 Drawing Figure(s); 39 Drawing Page(s)		
LINE COUNT:	5414		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 18 OF 26 USPATFULL

ACCESSION NUMBER: 2000:117691 USPATFULL
TITLE: Efflux pump inhibitors
INVENTOR(S): Chamberland, Suzanne, Los Gatos, CA, United States
Lee, May, Los Altos, CA, United States
Leger, Roger, Mountain View, CA, United States
Lee, Ving J., Los Altos, CA, United States
Renau, Thomas, Santa Clara, CA, United States
Zhang, Zhijia J., Foster City, CA, United States

PATENT ASSIGNEE(S): Microcide Pharmaceuticals, Inc., Mountain View, CA,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6114310		20000905
APPLICATION INFO.:	US 1998-12363		19980123 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Weddington, Kevin E		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	33		
EXEMPLARY CLAIM:	1		
LINE COUNT:	4949		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 19 OF 26 USPATFULL

ACCESSION NUMBER: 2000:37605 USPATFULL

TITLE: Rapid inducible beta-lactamase screen test
INVENTOR(S): Johnston, Judith, Carmichael, CA, United States
Felland, Tracy, Sacramento, CA, United States
Bascomb, Shoshana, Davis, CA, United States
Godsey, James H., Folsom, CA, United States

PATENT ASSIGNEE(S): Dade MicroScan Inc., West Sacramento, CA, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6043048		20000328
APPLICATION INFO.:	US 1996-686434		19960726 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-324387, filed on 17 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-109102, filed on 19 Aug 1993, now abandoned which is a continuation of Ser. No. US 1992-924351, filed on 31 Jul 1992, now abandoned which is a continuation of Ser. No. US 1991-696459, filed on 6 May 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Leary, Louise N.		
LEGAL REPRESENTATIVE:	Mueller, Lisa V, Tilton, Timothy L, Ruzsala, Lois K		
NUMBER OF CLAIMS:	7		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	435		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 20 OF 26 USPATFULL

ACCESSION NUMBER: 1999:150935 USPATFULL

TITLE: Method for screening for non-tetracycline efflux pump inhibitors

INVENTOR(S): Trias, Joaquim, San Mateo, CA, United States
Chamberland, Suzanne, Los Gatos, CA, United States
Hecker, Scott J., Los Gatos, CA, United States
Lee, Ving J., Los Altos, CA, United States

PATENT ASSIGNEE(S): Microcide Pharmaceuticals, Inc., Mountain View, CA,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5989832		19991123
APPLICATION INFO.:	US 1995-427088		19950421 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Feisee, Lila
ASSISTANT EXAMINER: Pak, Michael
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 110
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 3607
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 21 OF 26 USPATFULL

ACCESSION NUMBER: 1998:150449 USPATFULL
TITLE: Salmonella vaccines
INVENTOR(S): Miller, Samuel I., Seattle, WA, United States
Mekalanos, John J., Cambridge, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MS, United States (U.S. corporation)
President and Fellows of Harvard College, Cambridge, MS, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5843426		19981201
APPLICATION INFO.:	US 1995-565861		19951201 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-271354, filed on 6 Jul 1994, now patented, Pat. No. US 5695983 which is a continuation-in-part of Ser. No. US 1993-90526, filed on 9 Jul 1993, now patented, Pat. No. US 5599537 which is a continuation-in-part of Ser. No. US 1990-629602, filed on 18 Dec 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	LeGuvader, John L.		
ASSISTANT EXAMINER:	Brusca, John S.		
LEGAL REPRESENTATIVE:	Fish & Richardson P.C.		
NUMBER OF CLAIMS:	1		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	25 Drawing Figure(s); 20 Drawing Page(s)		
LINE COUNT:	4505		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 22 OF 26 USPATFULL

ACCESSION NUMBER: 97:115147 USPATFULL
TITLE: Salmonella vaccines
INVENTOR(S): Miller, Samuel I., Brookline, MA, United States
Mekalanos, John J., Cambridge, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)
President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5695983		19971209
APPLICATION INFO.:	US 1994-271354		19940706 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-90526, filed on 9 Jul 1993, now patented, Pat. No. US 5599537 which is a continuation-in-part of Ser. No. US 1990-629602, filed on 18 Dec 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Ketter, James		
ASSISTANT EXAMINER:	Brusca, John S.		
LEGAL REPRESENTATIVE:	Fish & Richardson P.C.		
NUMBER OF CLAIMS:	5		

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 23 OF 26 USPATFULL

ACCESSION NUMBER: 90:15473 USPATFULL
TITLE: Novel antibiotic NK84-0218 and process for the
production of the same
INVENTOR(S): Shimada, Nobuyoshi, Tokyo, Japan
Hasegawa, Shigeru, Saitama, Japan
Harada, Takashi, Tokyo, Japan
Tomizawa, Takayuki, Tokyo, Japan
Fujii, Akio, Kanagawa, Japan
PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Tokyo, Japan (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4904585		19900227
APPLICATION INFO.:	US 1987-115980		19871102 (7)
RELATED APPLN. INFO.:	Division of Ser. No. US 1985-796114, filed on 8 Nov 1985, now patented, Pat. No. US 4743689		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-243172	19841120
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Warren, Charles F.	
ASSISTANT EXAMINER:	Marx, Irene	
LEGAL REPRESENTATIVE:	Niels, Henry C.	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	489	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L16 ANSWER 24 OF 26 USPATFULL

ACCESSION NUMBER: 88:29511 USPATFULL
TITLE: Antibiotic derivative of adenine
INVENTOR(S): Shimada, Nobuyoshi, Tokyo, Japan
Hasegawa, Shigeru, Saitama, Japan
Harada, Takashi, Tokyo, Japan
Tomizawa, Takayuki, Tokyo, Japan
Fujii, Akio, Kanagawa, Japan
PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Tokyo, Japan (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4743689		19880510
APPLICATION INFO.:	US 1985-796114		19851108 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-243172	19841120
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Rizzo, Nicholas S.	
LEGAL REPRESENTATIVE:	Niels, Henry C.	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)	

LINE COUNT: 478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 25 OF 26 USPATFULL

ACCESSION NUMBER: 80:35722 USPATFULL
TITLE: Antibiotic No. 2-200 and process for producing thereof
INVENTOR(S): Oishi, Hideo, Sayama, Japan
Noto, Takao, Machida, Japan
Nawata, Yoshiharu, Kodaira, Japan
Okazaki, Hiroshi, Sayama, Japan
Sasaki, Hiroshi, Higashikurume, Japan
Ando, Kunio, Kawasaki, Japan
Ogawa, Haruki, Chofu, Japan
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4214091		19800722
APPLICATION INFO.:	US 1978-944303		19780921 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1977-113205	19770922
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Mars, Howard T.	
ASSISTANT EXAMINER:	Hendriksen, L.	
LEGAL REPRESENTATIVE:	Browdy and Neimark	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	360	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 26 OF 26 USPATFULL

ACCESSION NUMBER: 72:39274 USPATFULL
TITLE: BLEOMYCIN AND PROCESSES FOR THE PREPARATION THEREOF
INVENTOR(S): Umezawa, Hamao, 23 Kita-4-chome Toyotama, Nerima-ku, Tokyo, Japan
Maeda, Kenji, 258 Gotanda-1-chome, Shinagawa-ku, Tokyo, Japan
Okami, Yoshiro, 18-3 Denenchofu-6, Ota-ku, Tokyo, Japan
Takeuchi, Tomio, 273 Imaizumicho, Ota-ku, Tokyo, Japan

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3681491		19720801
APPLICATION INFO.:	US 1965-511448		19651203 (4)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1964-345233, filed on 17 Feb 1964, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1963-10177	19630305
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Goldberg, Jerome D.	
LEGAL REPRESENTATIVE:	Carlson; Curtis W., Brink; Richard H., Simonton; Robert B., Taylor, Jr.; Herbert W.	
NUMBER OF CLAIMS:	7	
LINE COUNT:	1017	

L6 ANSWER 1 OF 46 USPATFULL

ACCESSION NUMBER: 2002:43170 USPATFULL

TITLE: Methods and reagents for isolating biologically active antibodies

INVENTOR(S): Gyuris, Jeno, Winchester, MA, UNITED STATES
Ewert, Sebastian-Meier, Wolfratshausen, GERMANY,
FEDERAL REPUBLIC OF
Nagy, Zoltan, Wolfratshausen, GERMANY, FEDERAL REPUBLIC
OF
Morris, Aaron, Brighton, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002025536	A1	20020228
APPLICATION INFO.:	US 2001-891557	A1	20010626 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-214200P	20000626 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ROPES & GRAY, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624	
NUMBER OF CLAIMS:	83	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	3051	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 46 USPATFULL

ACCESSION NUMBER: 2002:16560 USPATFULL

TITLE: Methods and compositions for inhibiting adhesion by microorganisms

INVENTOR(S): Doyle, Ron J., Louisville, KY, UNITED STATES
Cowan, M. M., Cincinnati, OH, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002009436	A1	20020124
APPLICATION INFO.:	US 2000-750857	A1	20001229 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-173821P	19991230 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903	
NUMBER OF CLAIMS:	50	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	2655	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 46 USPATFULL

ACCESSION NUMBER: 2002:50620 USPATFULL

TITLE: Pathogenic Escherichia coli associated protein EspA

INVENTOR(S): Finlay, B. Brett, Richmond, CANADA
Kenny, Brendan, Redland, UNITED KINGDOM
Stein, Markus, Quercegrossa, ITALY
Donnenberg, Michael S., Baltimore, MD, United States
Lai, Li-Ching, Upper Arlington, OH, United States
PATENT ASSIGNEE(S): University of British Columbia, Vancouver, CANADA
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6355254	B1	20020312
	WO 9740063		19971030
APPLICATION INFO.:	US 1999-171517		19990810 (9)
	WO 1997-CA265		19970423
			19990810 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15999P	19960423 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Graser, Jennifer E.	
LEGAL REPRESENTATIVE:	SEED Intellectual Property Law Group PLLC	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	2147	

L6 ANSWER 4 OF 46 USPATFULL

ACCESSION NUMBER: 2002:19176 USPATFULL
 TITLE: Method of detecting shigella and shigella mxim DNA
 INVENTOR(S): Schuch, Raymond, Washington, DC, United States
 Sandlin, Robin C., Columbia, MD, United States
 Maurelli, Anthony T., Silver Spring, MD, United States
 PATENT ASSIGNEE(S): The Henry M. Jackson Foundation for the Advancement of
 Military Medicine, Rockville, MD, United States (U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6342352	B1	20020129
APPLICATION INFO.:	US 1999-296670		19990422 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-82944P	19980424 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Devi, S.	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	2019	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 46 USPATFULL

ACCESSION NUMBER: 2001:155455 USPATFULL
 TITLE: **Salmonella** vaccine
 INVENTOR(S): Nuijten, Petrus Johannes Maria, Boxmeer, Netherlands
 Witvliet, Maarten Hendrik, Oostrum, Netherlands

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021386	A1	20010913
APPLICATION INFO.:	US 2000-749025	A1	20001227 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-204564	19991228
DOCUMENT TYPE:	Utility	

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: William M. Blackstone, Akzo nobel Patent Department,
Suite 206, 1300 Piccard Drive, Rockville, MD, 20850
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 745
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 46 USPATFULL
ACCESSION NUMBER: 2001:214821 USPATFULL
TITLE: Sensor for analyte detection
INVENTOR(S): Bauer, Alan Joseph, Jerusalem, Israel
PATENT ASSIGNEE(S): Biosensor Systems Design., Inc., Cedarhurst, NY, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6322963	B1	20011127
	WO 9966322		19991223
APPLICATION INFO.:	US 2000-701906		20001205 (9)
	WO 1999-IL309		19990610
			20001205 PCT 371 date
			20001205 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-110686, filed on 7 Jul 1998, now patented, Pat. No. US 6096497		

	NUMBER	DATE
PRIORITY INFORMATION:	IL 1998-124903	19980615
	IL 1998-125720	19980819
	IL 1998-127019	19981112
	IL 1999-129754	19990504

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Leary, Louise N.
LEGAL REPRESENTATIVE: Bickel, Arthur S.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1686
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 46 USPATFULL
ACCESSION NUMBER: 2001:97685 USPATFULL
TITLE: Devices and methods for detecting target molecules in
biological samples
INVENTOR(S): Muir, Andrew R., Cohasset, MA, United States
Boles, T. Christian, Waltham, MA, United States
Adams, Christopher P., Somerville, MA, United States
PATENT ASSIGNEE(S): Mosaic Technologies, Inc., Waltham, MA, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6251660	B1	20010626
APPLICATION INFO.:	US 1998-200126		19981125 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-66508P	19971125 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Sisson, Bradley L.	

LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 2459
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 46 USPATFULL
ACCESSION NUMBER: 2001:40233 USPATFULL
TITLE: 66 kDa antigen from Borrelia
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, Irvine, CA, United States
PATENT ASSIGNEE(S): Symbicom Aktiebolag, Umea, Sweden (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6204018	B1	20010320
	WO 9535379		19951228
APPLICATION INFO.:	US 1997-750494		19970612 (8)
	WO 1995-US7665		19950619
			19970612 PCT 371 date
			19970612 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-262220, filed on 20 Jun 1994, now patented, Pat. No. US 6054296		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Minnifield, Nita M.		
LEGAL REPRESENTATIVE:	Frommer Lawrence & Haug LLP, Frommer, William S., Kolawski, Thomas J.		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	2159		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 9 OF 46 USPATFULL
ACCESSION NUMBER: 2001:40219 USPATFULL
TITLE: Immunodiagnostic test for enterohemorrhagic Escherichia
coli infection
INVENTOR(S): Kaper, James B., Pasadena, MD, United States
Jarvis, Karen, Arnold, MD, United States
PATENT ASSIGNEE(S): University of Maryland, Baltimore, Baltimore, MD,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6204004	B1	20010320
APPLICATION INFO.:	US 1997-821872		19970321 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Smith, Lynette R. F.		
ASSISTANT EXAMINER:	Portner, Ginny Allen		
LEGAL REPRESENTATIVE:	Smith, Chalin A., Marks, David L.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 7 Drawing Page(s)		
LINE COUNT:	970		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 10 OF 46 USPATFULL
ACCESSION NUMBER: 2001:29312 USPATFULL
TITLE: Facile method for identifying regulated promoters
INVENTOR(S): LaRossa, Robert Alan, West Chester, PA, United States

PATENT ASSIGNEE(S): Van Dyk, Tina Kangas, Wilmington, DE, United States
E. I. du Pont de Nemours and Company, Wilmington, DE,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6194159	B1	20010227
APPLICATION INFO.:	US 1999-449083		19991124 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-735545, filed on 23 Oct 1996, now patented, Pat. No. US 6025131		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Elliott, George C.		
ASSISTANT EXAMINER:	Sandals, William		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1469		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 11 OF 46 USPATFULL
ACCESSION NUMBER: 2001:25436 USPATFULL
TITLE: Attenuated mutants of **salmonella** which constitutively express the Vi antigen
INVENTOR(S): Noriega, Fernando R., Baltimore, MD, United States
Sztein, Marcelo B., Columbia, MD, United States
Levine, Myron M., Columbia, MD, United States
PATENT ASSIGNEE(S): University of Maryland, Baltimore, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6190669	B1	20010220
APPLICATION INFO.:	US 1998-76761		19980513 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Duffy, Patricia A.		
LEGAL REPRESENTATIVE:	Sughrue, Mion, Zinn Macpeak & Seas. PLLC		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	17 Drawing Figure(s); 15 Drawing Page(s)		
LINE COUNT:	1873		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 12 OF 46 USPATFULL
ACCESSION NUMBER: 2001:25429 USPATFULL
TITLE: Materials and methods relating to the attachment and display of substances on cell surfaces
INVENTOR(S): Steidler, Lothar, Ghent, Belgium
Remaut, Erik, Ghent, Belgium
Wells, Jeremy Mark, Cambridge, United Kingdom
PATENT ASSIGNEE(S): Vlaams Interuniversitair Instituut voor Biotechnologie (VIB) vzw, Zwijnaarde, Belgium (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6190662	B1	20010220
APPLICATION INFO.:	US 1998-36609		19980306 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 1996-GB2195, filed on 6 Sep 1996		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-18323	19950907

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Navarro, Albert
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 46 USPATFULL

ACCESSION NUMBER: 2000:134749 USPATFULL
TITLE: Recombinant flagellin vaccines
INVENTOR(S): Majarian, William R., Mt. Royal, NJ, United States
Stocker, Bruce A. D., Palo Alto, CA, United States
Newton, Salete M. C., Mountain View, CA, United States
PATENT ASSIGNEE(S): American Cyanamid Company, Madison, NJ, United States
(U.S. corporation)
The Board of Trustees of the Leland Stanford Junior
University, Stanford, CA, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6130082		20001010
APPLICATION INFO.:	US 1992-837668		19920214 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-348430, filed on 5 May 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-190570, filed on 5 May 1988, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Mosher, Mary E.
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT: 2404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 14 OF 46 USPATFULL

ACCESSION NUMBER: 2000:91741 USPATFULL
TITLE: 66 kDa antigen from Borrelia
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, San Antonio, TX, United States
PATENT ASSIGNEE(S): Symbicom AB, Umea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6090586		20000718
APPLICATION INFO.:	US 1995-468878		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-262220, filed on 20 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Ryan, V.
LEGAL REPRESENTATIVE: Frommer, Esq., William S., Kowalski, Esq., Thomas
J.Frommer Lawrence & Haug LLP

NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 3064
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 15 OF 46 USPATFULL

ACCESSION NUMBER: 2000:77180 USPATFULL
TITLE: Thermophilic DNA polymerases from Thermotoga
neapolitana
INVENTOR(S): Slater, Michael R., Madison, WI, United States
Huang, Fen, Madison, WI, United States
Hartnett, James R., Fitchburg, WI, United States
Bolchakova, Elena, Foster City, CA, United States
Storts, Douglas R., Madison, WI, United States
Otto, Paul, Madison, WI, United States
Miller, Katharine M., Verona, WI, United States
Novikov, Alexander, Foster City, CA, United States
Velikodvorskaya, Galina A., Moscow, Russian Federation
PATENT ASSIGNEE(S): Promega Corporation, Madison, WI, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6077664		20000620
APPLICATION INFO.:	US 1996-656664		19960531 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-484661, filed on 7 Jun 1995, now patented, Pat. No. US 6001645		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Horlick, Kenneth R.		
LEGAL REPRESENTATIVE:	Melden & Carroll, LLP.		
NUMBER OF CLAIMS:	48		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	7498		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 16 OF 46 USPATFULL

ACCESSION NUMBER: 2000:67433 USPATFULL
TITLE: 66 kDa antigen from Borrelia
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, San Antonio, TX, United States
PATENT ASSIGNEE(S): Symbicom AB, Ulmea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6068842		20000530
APPLICATION INFO.:	US 1995-471733		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-262220, filed on 20 Jun 1994 which is a continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Housel, James C.		
ASSISTANT EXAMINER:	Ryan, V.		
LEGAL REPRESENTATIVE:	Frommer, Esq., William S., Kowalski, Esq., Thomas J.Frommer Lawrence & Haug LLP		
NUMBER OF CLAIMS:	16		
EXEMPLARY CLAIM:	1		

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 3138
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 17 OF 46 USPATFULL

ACCESSION NUMBER: 2000:65007 USPATFULL
TITLE: Genes encoding insecticidal proteins
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
Nye, Gordon J., Apex, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6066783		20000523
APPLICATION INFO.:	US 1999-300529		19990427 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-469334, filed on 6 Jun 1995 which is a division of Ser. No. US 1995-463483, filed on 5 Jun 1995, now patented, Pat. No. US 5849870 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1994-US3131	19940323
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Nashed,, Nashaat	
LEGAL REPRESENTATIVE:	Meigs, J. Timothy, Pace, Gary	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	7082	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 18 OF 46 USPATFULL

ACCESSION NUMBER: 2000:50546 USPATFULL
TITLE: 66 kDa antigen from Borrelia
INVENTOR(S): Bergstrom, Sven, Umea, Sweden
Barbour, Alan George, San Antonio, TX, United States
PATENT ASSIGNEE(S): Symbicom AB, Umea, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6054296		20000425
APPLICATION INFO.:	US 1994-262220		19940620 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-79601, filed on 22 Jun 1993, now patented, Pat. No. US 5523089 which is a continuation of Ser. No. US 1992-924798, filed on 6 Aug 1992, now abandoned which is a continuation of Ser. No. US 1989-422881, filed on 18 Oct 1989, now abandoned		

NUMBER	DATE
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PRIORITY INFORMATION: DK 1988-5902 19881024
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Ryan, V.
LEGAL REPRESENTATIVE: Frommer, Esq., William S., Kowalski, Esq., Thomas
J.Frommer Lawrence & Haug LLP
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 3433
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 19 OF 46 USPATFULL
ACCESSION NUMBER: 2000:18217 USPATFULL
TITLE: Facile method for identifying regulated promoters
INVENTOR(S): Larossa, Robert Alan, West Chester, PA, United States
Van Dyk, Tina Kangas, Wilmington, DE, United States
PATENT ASSIGNEE(S): E. I. du Pont de Namours and Company, Wilmington, DE,
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6025131		20000215
APPLICATION INFO.:	US 1996-735545		19961023 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brusca, John S.		
ASSISTANT EXAMINER:	Sandals, William		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1800		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 20 OF 46 USPATFULL
ACCESSION NUMBER: 1999:163500 USPATFULL
TITLE: Thermophilic DNA polymerases from thermotoga
neapolitana
INVENTOR(S): Slater, Michael R., Madison, WI, United States
Huang, Fen, Madison, WI, United States
Hartnett, James R., Fitchburg, WI, United States
PATENT ASSIGNEE(S): Promega Corporation, WI, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6001645		19991214
APPLICATION INFO.:	US 1995-484661		19950607 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Sisson, Bradley		
ASSISTANT EXAMINER:	Stole, Einar		
LEGAL REPRESENTATIVE:	Medlen & Carroll, LLP		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	6586		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 21 OF 46 USPATFULL
ACCESSION NUMBER: 1999:151483 USPATFULL
TITLE: Stably transformed plants comprising novel insecticidal
proteins

INVENTOR(S): Warren, Gregory W., Cary, NC, United States
 Koziel, Michael G., Cary, NC, United States
 Mullins, Martha A., Raleigh, NC, United States
 Nye, Gordon J., Apex, NC, United States
 Carr, Brian, Cary, NC, United States
 Desai, Nalini M., Cary, NC, United States
 Kostichka, Kristy, Durham, NC, United States
 Duck, Nicholas B., Cary, NC, United States
 Estruch, Juan J., Durham, NC, United States
 PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5990383		19991123
APPLICATION INFO.:	US 1995-469334		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Nashed, Nashaat T.		
LEGAL REPRESENTATIVE:	Pace, Gary M.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	6008		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 22 OF 46 USPATFULL
 ACCESSION NUMBER: 1999:40588 USPATFULL
 TITLE: Nucleotide sequences encoding pesticidal proteins
 INVENTOR(S): Warren, Gregory W., Cary, NC, United States
 Koziel, Michael G., Cary, NC, United States
 Mullins, Martha A., Raleigh, NC, United States
 Nye, Gordon J., Apex, NC, United States
 Carr, Brian, Cary, NC, United States
 Desai, Nalini M., Cary, NC, United States
 Kostichka, Kristy, Durham, NC, United States
 Estruch, Juan J., Durham, NC, United States
 PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5889174		19990330
APPLICATION INFO.:	US 1995-470567		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Railey, II, Johnny F.		
LEGAL REPRESENTATIVE:	Pace, Gary M., Meigs, J. T.		
NUMBER OF CLAIMS:	11		

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 4921
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 23 OF 46 USPATFULL

ACCESSION NUMBER: 1999:40221 USPATFULL
TITLE: Pesticidal strains of bacillus
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
de Framond, Annick J., Pittsboro, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5888801		19990330
APPLICATION INFO.:	US 1995-467506		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned Continuation of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Marx, Irene		
LEGAL REPRESENTATIVE:	Meigs, J. Timothy, Pace, Gary M.		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	4908		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 24 OF 46 USPATFULL

ACCESSION NUMBER: 1999:27448 USPATFULL
TITLE: Methods and compositions for the preparation of recombinant Trichomonas vaginalis proteins and peptides
INVENTOR(S): Alderete, John F., San Antonio, TX, United States
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5876985		19990302
APPLICATION INFO.:	US 1994-259966		19940614 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-692382, filed on 25 Apr 1991, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Patterson, Jr., Charles L.		
ASSISTANT EXAMINER:	Moore, William W.		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	21		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 12 Drawing Page(s)		
LINE COUNT:	2363		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 25 OF 46 USPATFULL

ACCESSION NUMBER: 1999:22191 USPATFULL
TITLE: Pesticidal proteins and strains
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States

Mullins, Martha A., Raleigh, NC, United States
Nye, Gordon J., Apex, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5872212		19990216
APPLICATION INFO.:	US 1995-470566		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Russel, Jeffrey E.		
LEGAL REPRESENTATIVE:	Meigs, J. Timothy, Pace, Gary M.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	2555		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 26 OF 46 USPATFULL

ACCESSION NUMBER: 1999:15684--USPATFULL
TITLE: Method for isolating vegetative insecticidal protein genes
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
Nye, Gordon J., Apex, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
Duck, Nicholas B., Cary, NC, United States
Estruch, Juan J., Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5866326		19990202
APPLICATION INFO.:	US 1995-471046		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wortman, Donna C.		
LEGAL REPRESENTATIVE:	Meigs, J. Timothy, Pace, Gary M.		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
LINE COUNT:	4930		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 27 OF 46 USPATFULL

ACCESSION NUMBER: 1999:1223 USPATFULL
TITLE: Avirulent microbes and uses therefor
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
Kelly, Sandra M., St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5855880		19990105
APPLICATION INFO.:	US 1996-596732		19960205 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-209542, filed on 10 Mar 1994 which is a continuation-in-part of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -200934 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Laurie		
LEGAL REPRESENTATIVE:	Howell & Haferkamp, L.C.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	3409		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 28 OF 46 USPATFULL

ACCESSION NUMBER: 1999:1222 USPATFULL
TITLE: Avirulent microbes and uses therefor
INVENTOR(S): Curtiss III, Roy, St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5855879		19990105
APPLICATION INFO.:	US 1994-209542		19940310 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1991-785748, filed on 7 Nov 1991, now patented, Pat. No. US 5294441 which is a continuation-in-part of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -612001 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Scheiner, Laurie		
LEGAL REPRESENTATIVE:	Howell & Haferkamp, L.C.		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		

LINE COUNT: 3399
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 29 OF 46 USPATFULL

ACCESSION NUMBER: 1998:115424 USPATFULL
TITLE: Vaccines containing bacteria attenuated by mutations in two genes of the aromatic amino acid biosynthetic pathway
INVENTOR(S): Dougan, Gordon, Beckenham, United Kingdom
Chatfield, Steven Neville, Beckenham, United Kingdom
Hormaeche, Carlos Estenio, Cambridge, United Kingdom
PATENT ASSIGNEE(S): Glaxo Wellcome, Inc., Research Triangle Park, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5811105		19980922
APPLICATION INFO.:	US 4492978		19950524 (8)
DISCLAIMER DATE:	20180623		
RELATED APPLN. INFO.:	Division of Ser. No. 135436, filed on 13 Oct 1993, now abandoned which is a continuation of Ser. No. 979460, filed on 20 Nov 1992, now abandoned which is a continuation of Ser. No. 857092, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. 642138, filed on 15 Jan 1991, now abandoned which is a continuation of Ser. No. 399539, filed on 22 Aug 1989, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 8730037	19871223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Minnifield, Nita	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye, P.C.	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	628	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 30 OF 46 USPATFULL

ACCESSION NUMBER: 1998:157470 USPATFULL
TITLE: Pesticidal proteins and strains
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
Nye, Gordon J., Apex, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
Duck, Nicholas B., Cary, NC, United States
Estruch, Juan J., Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5849870		19981215
APPLICATION INFO.:	US 1995-463483		19950605 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a		

continuation-in-part of Ser. No. US 1993-37057, filed
on 19 Mar 1993, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Nashed, Nashaat T.
LEGAL REPRESENTATIVE: Pace, Ph.D., Gary M.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 4928
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 31 OF 46 USPATFULL
ACCESSION NUMBER: 1998:147579 USPATFULL
TITLE: Pesticidal proteins and strains
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5840868		19981124
APPLICATION INFO.:	US 1995-471044		19950606 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Degen, Nancy
ASSISTANT EXAMINER: Wang, Andrew
LEGAL REPRESENTATIVE: Pace, Gary M.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 4896
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 32 OF 46 USPATFULL
ACCESSION NUMBER: 1998:72719 USPATFULL
TITLE: Auxiliary proteins for enhancing the insecticidal
activity of pesticidal proteins
INVENTOR(S): Warren, Gregory W., Cary, NC, United States
Koziel, Michael G., Cary, NC, United States
Mullins, Martha A., Raleigh, NC, United States
Nye, Gordon J., Apex, NC, United States
Carr, Brian, Cary, NC, United States
Desai, Nalini M., Cary, NC, United States
Kostichka, Kristy, Durham, NC, United States
Duck, Nicholas B., Cary, NC, United States
Estruch, Juan J., Durham, NC, United States
PATENT ASSIGNEE(S): Novartis Corporation, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5770696 19980623
 APPLICATION INFO.: US 1995-471033 19950606 (8)
 RELATED APPLN. INFO.: Division of Ser. No. US 1995-463483, filed on 5 Jun 1995 which is a continuation-in-part of Ser. No. US 1994-314594, filed on 28 Sep 1994 which is a continuation-in-part of Ser. No. US 1994-218018, filed on 23 Mar 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-37057, filed on 25 Mar 1993, now abandoned

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Wax, Robert A.
 ASSISTANT EXAMINER: Nashed, Nashaat T.
 LEGAL REPRESENTATIVE: Pace, Gary M.
 NUMBER OF CLAIMS: 6
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
 LINE COUNT: 3023
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 33 OF 46 USPATFULL
 ACCESSION NUMBER: 1998:72257 USPATFULL
 TITLE: Vaccines containing **salmonella** bacteria attenuated by mutations in two genes of the aromatic amino acid biosynthetic pathway

INVENTOR(S): Dougan, Gordon, Beckenham, United Kingdom
 Chatfield, Steven Neville, Beckenham, United Kingdom
 Hormaeche, Carlos Estenio, Cambridge, United Kingdom

PATENT ASSIGNEE(S): Glaxo Wellcome, Inc., Research Triangle Park, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5770214		19980623
APPLICATION INFO.:	US 1995-484314		19950607 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1993-135436, filed on 13 Oct 1993, now abandoned which is a continuation of Ser. No. US 1992-979460, filed on 20 Nov 1992, now abandoned which is a continuation of Ser. No. US 1992-857092, filed on 20 Mar 1992, now abandoned which is a continuation of Ser. No. US 1991-642138, filed on 15 Jan 1991, now abandoned which is a continuation of Ser. No. US 1989-399539, filed on 22 Aug 1989, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1987-30037	19871223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Minnifield, Nita	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye, P.C.,	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	599	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L6 ANSWER 34 OF 46 USPATFULL
 ACCESSION NUMBER: 97:123350 USPATFULL
 TITLE: Nucleic acid encoding helicobacter pylori enolase
 INVENTOR(S): Thompson, Stuart A., Joelton, TN, United States
 Blaser, Martin J., Nashville, TN, United States
 PATENT ASSIGNEE(S): Vanderbilt University, Nashville, TN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5703219		19971230
APPLICATION INFO.:	US 1995-446920		19950522 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-215928, filed on 21 Mar 1994, now patented, Pat. No. US 5434253, issued on 18 Jul 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Lau, Kawai		
LEGAL REPRESENTATIVE:	Needle & Rosenberg, PC		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)		
LINE COUNT:	1485		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 35 OF 46 USPATFULL
 ACCESSION NUMBER: 97:70928 USPATFULL
 TITLE: Recombinant avirulent **salmonella** antifertility vaccines
 INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
 Tung, Kenneth S. K., Charlottesville, VA, United States
 PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5656488		19970812
APPLICATION INFO.:	US 1994-222182		19940401 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-791347, filed on 18 Nov 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-615720, filed on 21 Nov 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Cunningham, Thomas M.		
LEGAL REPRESENTATIVE:	Howell & Haferkamp, L.C.		
NUMBER OF CLAIMS:	50		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	23 Drawing Figure(s); 20 Drawing Page(s)		
LINE COUNT:	3112		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 36 OF 46 USPATFULL
 ACCESSION NUMBER: 97:47098 USPATFULL
 TITLE: Method of detecting ligand interactions
 INVENTOR(S): McCoy, John M., Reading, MA, United States
 Lu, Zhijian, Arlington, MA, United States
 PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5635182		19970603
APPLICATION INFO.:	US 1994-260582		19940616 (8)
DISCLAIMER DATE:	20101214		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wax, Robert A.		
ASSISTANT EXAMINER:	Bugalsky, Gabriele E.		
LEGAL REPRESENTATIVE:	Meinert, M. C.		

NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1935
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:629955 CAPLUS
DOCUMENT NUMBER: 125:296910
TITLE: Molecular genetic analysis of motility mutants (motA, motB) in bacteria
AUTHOR(S): Yamaguchi, Shigeru; Togashi, Fumiko; Yu, Richard C.; Macnab, Robert M.
CORPORATE SOURCE: Fac. Commer., Meiji Univ., Tokyo, 168, Japan
SOURCE: Meiji Daigaku Kagaku Gijutsu Kenkyusho Kiyo (1996), Volume Date 1995, 34(6), 87-107
CODEN: MDKKDY; ISSN: 0386-4944
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L6 ANSWER 38 OF 46 USPATFULL
ACCESSION NUMBER: 95:11759 USPATFULL
TITLE: Avirulent microbes and uses therefor:
Salmonella typhi
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
Kelly, Sandra M., St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5387744		19950207
APPLICATION INFO.:	US 1993-88394		19930707 (8)
DISCLAIMER DATE:	20110315		
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-975892, filed on 13 Nov 1992, now abandoned which is a continuation of Ser. No. US 1990-612001, filed on 9 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US 1988-200934, filed on 1 Jun 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-58360, filed on 4 Jun 1987, now abandoned, said Ser. No. US -612001 which is a continuation-in-part of Ser. No. US 1988-251304, filed on 3 Oct 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-106072, filed on 7 Oct 1987, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Low, Christopher S. F.		
LEGAL REPRESENTATIVE:	Rogers, Howell & Haferkamp		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	2718		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L6 ANSWER 39 OF 46 USPATFULL
ACCESSION NUMBER: 94:22076 USPATFULL
TITLE: Avirulent microbes and uses therefor:
salmonella typhi
INVENTOR(S): Curtiss, III, Roy, St. Louis, MO, United States
PATENT ASSIGNEE(S): Washington University, St. Louis, MO, United States
(U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5294441 19940315
 APPLICATION INFO.: US 1991-785748 19911107 (7)
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-612001, filed
 on 9 Nov 1990, now abandoned which is a
 continuation-in-part of Ser. No. US 1988-200934, filed
 on 1 Jun 1988, now abandoned which is a
 continuation-in-part of Ser. No. US 1987-58360, filed
 on 4 Jun 1987, now abandoned, said Ser. No. 612001
 which is a continuation-in-part of Ser. No. US
 1988-251304, filed on 3 Oct 1988, now abandoned which
 is a continuation-in-part of Ser. No. US 1987-106072,
 filed on 7 Oct 1987, now abandoned
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Low, Christopher S. F.
 LEGAL REPRESENTATIVE: Rogers, Howell & Haferkamp
 NUMBER OF CLAIMS: 12
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
 LINE COUNT: 3370
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 40 OF 46 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
1

ACCESSION NUMBER: 1994:226104 BIOSIS
 DOCUMENT NUMBER: PREV199497239104
 TITLE: Hypervariable region IV of **Salmonella** gene fliC-d
 encodes a dominant surface epitope and a stabilizing factor
 for functional **flagella**.
 AUTHOR(S): He, Xiao-Song; Rivkina, Marianne; Stocker, Bruce A. D.;
 Robinson, William S. (1)
 CORPORATE SOURCE: (1) Dep. Med., Stanford Univ. Sch. Med., Stanford, CA 94305
 USA
 SOURCE: Journal of Bacteriology, (1994) Vol. 176, No. 8, pp.
 2406-2414.
 ISSN: 0021-9193.
 DOCUMENT TYPE: Article
 LANGUAGE: English

L6 ANSWER 41 OF 46 USPATFULL
 ACCESSION NUMBER: 93:78691 USPATFULL
 TITLE: Virulence associated proteins in *Borrelia burgdorferi*
 (BB)
 INVENTOR(S): Norris, Steven J., Houston, TX, United States
 Barbour, Alan G., San Antonio, TX, United States
 PATENT ASSIGNEE(S): Board of Regents, The University of Texas System,
 Austin, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5246844		19930921
APPLICATION INFO.:	US 1991-781355		19911022 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nucker, Christine M.		
ASSISTANT EXAMINER:	Dubrulle, Chris		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	1705		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 42 OF 46 MEDLINE
 ACCESSION NUMBER: 91217072 MEDLINE
 DOCUMENT NUMBER: 91217072 PubMed ID: 1902474
 TITLE: Roles of the highly conserved aspartate and lysine residues
 in the response regulator of bacterial chemotaxis.
 AUTHOR: Lukat G S; Lee B H; Mottonen J M; Stock A M; Stock J B
 CORPORATE SOURCE: Department of Molecular Biology, Princeton University, New
 Jersey 08544-1014.
 CONTRACT NUMBER: AI20980 (NIAID)
 SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1991 May 5) 266 (13)
 8348-54.
 Journal code: HIV; 2985121R. ISSN: 0021-9258.
 PUB. COUNTRY: United States
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199106
 ENTRY DATE: Entered STN: 19910623
 Last Updated on STN: 19910623
 Entered Medline: 19910605

L6 ANSWER 43 OF 46 MEDLINE
 ACCESSION NUMBER: 91251772 MEDLINE
 DOCUMENT NUMBER: 91251772 PubMed ID: 1710314
 TITLE: Segment IV of a **Salmonella** flagellin gene
 specifies flagellar antigen epitopes.
 AUTHOR: Newton S M; Wasley R D; Wilson A; Rosenberg L T; Miller J
 F; Stocker B A
 CORPORATE SOURCE: Departamento de Microbiologia, Universidad de Sao Paulo,
 Sao Paulo, Brazil.
 CONTRACT NUMBER: AI-18872 (NIAID)
 AI-27722 (NIAID)
 SOURCE: MOLECULAR MICROBIOLOGY, (1991 Feb) 5 (2) 419-25.
 Journal code: MOM; 8712028. ISSN: 0950-382X.
 PUB. COUNTRY: ENGLAND: United Kingdom
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199107
 ENTRY DATE: Entered STN: 19910728
 Last Updated on STN: 19960129
 Entered Medline: 19910705

L6 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
 ACCESSION NUMBER: 1991:528699 CAPLUS
 DOCUMENT NUMBER: 115:128699
 TITLE: Point mutations that lock **Salmonella**
 typhimurium flagellar filaments in the straight
 right-handed and left-handed forms and their relation
 to filament superhelicity
 AUTHOR(S): Hyman, Hana C.; Trachtenberg, Shlomo
 CORPORATE SOURCE: Hadassah Med. Sch., Hebrew Univ., Jerusalem, 91010,
 Israel
 SOURCE: J. Mol. Biol. (1991), 220(1), 79-88
 CODEN: JMOBAK; ISSN: 0022-2836
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L6 ANSWER 45 OF 46 USPATFULL
 ACCESSION NUMBER: 75:64202 USPATFULL
 TITLE: Antibiotic XK-49-1-B-2 and process for production
 thereof using streptosporangium violaceochromogenes
 INVENTOR(S): Nara, Takashi, Tokyo, Japan
 Takasawa, Seigo, Kawasaki, Japan

Okachi, Ryo, Machida, Japan
 Kawamoto, Isao, Machida, Japan
 Kohagura, Masahiro, Shizuoka, Japan
 Takahashi, Itaru, Shizuoka, Japan
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Tokyo, Japan (non-U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3922343		19751125
APPLICATION INFO.:	US 1973-393829		19730904 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1972-89085	19720907
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Rosen, Sam	
ASSISTANT EXAMINER:	Stephens, Daren M.	
LEGAL REPRESENTATIVE:	Fitzpatrick, Cella, Harper & Scinto	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1,4	
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)	
LINE COUNT:	645	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 46 OF 46 USPATFULL

ACCESSION NUMBER: 75:15410 USPATFULL
 TITLE: Antibiotics platomycin A and B and process for
 production thereof

INVENTOR(S): Nara, Takashi, Tokyo, Japan
 Takasawa, Seigo, Kawasaki, Japan
 Okachi, Ryo, Tokyo, Japan
 Kawamoto, Isao, Tokyo, Japan
 Sato, Seiji, Tokyo, Japan
 Yamamoto, Mitsuyoshi, Tokyo, Japan
 Sato, Tomoyasu, Tokyo, Japan
 Morikawa, Atsuko, Tokyo, Japan
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Tokyo, Japan (non-U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3873692		19750325
APPLICATION INFO.:	US 1974-441838		19740212 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1973-20624	19730222
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Goldberg, Jerome D.	
LEGAL REPRESENTATIVE:	Fitzpatrick, Cella, Harper & Scinto	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	634	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DN BA62:2204
TI CONTROLLED FIELD TRIAL OF A TYPHOID **VACCINE** PREPARED WITH A
NONMOTILE MUTANT OF **SALMONELLA-TYPHI** TY-2.
AU WAHDAN M H; SIPPEL J E; MIKHAIL I A; RAHKA A E; ANDERSON E S; SPARKS H A;
CVJETANOVIC B
SO BULL W H O, (1975 (RECD 1976)) 52 (1), 69-73.
CODEN: BWHOA6. ISSN: 0366-4996.
FS BA; OLD
LA Unavailable

L8 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1972:10919 BIOSIS
DN BR08:10919
TI PROPOSED USE OF A **NONMOTILE** VARIANT OF **SALMONELLA-**
TYPHI FOR THE PREPARATION OF **VACCINE** AGAINST TYPHOID
FEVER..
AU ANDERSON E S
SO REGAMEY, R.H., M. STANIC AND J. UNGER (EDITED BY). SYMPOSIA SERIES IN
IMMUNOBIOLOGICAL STANDARDIZATION, VOL. 15. INTERNATIONAL SYMPOSIUM ON
ENTEROBACTERIAL VACCINES. SYMPOSIUM. VIII+296P. ILLUS. S. KARGER: BASEL,
SWITZERLAND (DIST. IN U.S.A. BY ALBERT J. PHIEBIG, WHITE PLAINS, N.Y.).
(1971) 79-86.
FS BR; OLD
LA Unavailable

The present invention is directed to recombinant genes and their encoded proteins which are recombinant flagellin fusion proteins. Such fusion proteins comprise amino acid sequences specifying an epitope encoded by a flagellin structural gene and an epitope of a heterologous organism which is immunogenic upon introduction of the fusion protein into a vertebrate host. The recombinant genes and proteins of the present invention can be used in **vaccine** formulations, to provide protection against infection by the heterologous organism, or to provide protection against conditions or disorders caused by an antigen of the organism. In a specific embodiment, attenuated invasive bacteria expressing the recombinant flagellin genes of the invention can be used in live **vaccine** formulations. The invention is illustrated by way of examples in which epitopes of malaria circumsporozoite antigens, the B subunit of Cholera toxin, surface and presurface antigens of Hepatitis B. VP7 polypeptide of rotavirus, envelope glycoprotein of HIV, and M protein of Streptococcus, are expressed in recombinant flagellin fusion proteins which assemble into functional flagella, and which provoke an immune response directed against the heterologous epitope, in a vertebrate host.

AN 2000:134749 USPATFULL
TI Recombinant flagellin **vaccines**
IN Majarian, William R., Mt. Royal, NJ, United States
Stocker, Bruce A. D., Palo Alto, CA, United States
Newton, Salete M. C., Mountain View, CA, United States
PA American Cyanamid Company, Madison, NJ, United States (U.S. corporation)
The Board of Trustees of the Leland Stanford Junior University,
Stanford, CA, United States (U.S. corporation)
PI US 6130082 20001010
AI US 1992-837668 19920214 (7)
RLI Continuation of Ser. No. US 1989-348430, filed on 5 May 1989, now
abandoned which is a continuation-in-part of Ser. No. US 1988-190570,
filed on 5 May 1988, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Mosher, Mary E.
LREP Hamilton, Brook, Smith & Reynolds, P.C.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 17 Drawing Page(s)
LN.CNT 2404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 5 USPATFULL

AB This invention relates to flagella-less strains of Borrelia and to novel methods for use of the microorganisms as **vaccines** and in diagnostic assays. Although a preferred embodiment of the invention is directed to Borrelia burgdorferi, the present invention encompasses flagella-less strains of other microorganisms belonging to the genus Borrelia. Accordingly, with the aid of the disclosure, flagella-less mutants of other Borrelia species, e.g., B. coriacei, which causes epidemic bovine abortion, B. anserina, which causes avian spirochetosis, and B. recurrentis and other Borrelia species causative of relapsing fever, such as Borrelia hermsii, Borrelia turicatae, Borrelia duttoni, Borrelia persica, and Borrelia hispanica, can be prepared and used in accordance with the present invention and are within the scope of the invention. Therefore, a preferred embodiment comprises a composition of matter comprising a substantially pure preparation of a strain of a flagella-less microorganism belonging to the genus Borrelia.

AN 95:66995 USPATFULL
TI Flagella-less borrelia
IN Barbour, Alan G., San Antonio, TX, United States
Bundoc, Virgilio, San Antonio, TX, United States
PA University of Texas System, Austin, TX, United States (U.S. corporation)
PI US 5436000 19950725

AI US 1991-641143 19910111 (7)
DT Utility
FS Granted
EXNAM Primary Examiner: Sidberry, Hazel F.
LREP Arnold, White & Durkee
CLMN Number of Claims: 1
ECL Exemplary Claim: 1
DRWN 23 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 1300

L8 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1

AB A total of 21 cases of laboratory-acquired typhoid fever associated with teaching and proficiency tests occurred in the USA during a 33-mo. period, prompting a search for less virulent strains of *S. typhi* which would be suitable for teaching purposes. Two strains were evaluated which are reported to have reduced virulence for humans if grown under special laboratory conditions (in the presence of 0.1% D-galactose) and has been evaluated as a candidate for use as a live, oral **vaccine**. Strain H901 was originally isolated in the USSR in 1981. It has not been tested in humans, but its **nonmotile** variant, 0901, has been found to be somewhat less virulent for humans; however, it can cause infection with doses of 107 organisms. In teaching exercises, all strains should be treated as though they are fully virulent. Ty21a and H901 were satisfactory, but not ideal, for teaching purposes. Biochemically, they could be identified by conventional tests and by commercially available diagnostic systems, although Ty21 was H2S negative. Serologically, both strains posed problems. Both Ty21a and H901 were Vi antigen negative, and Ty21a was rough and grew poorly. Both strains were susceptible to antibiotics, including chloramphenicol, ampicillin and trimethoprim-sulfamethoxazole. When Ty21a and H901 were mixed with *Escherichia coli* and plated, Hektoen and Salmonella-Shigella agars were most useful for their recovery. The appearance of Ty21a and H901 on differential plating media was typical, although Ty21a had smaller colonies. The plating efficiency on MacConkey agar for Ty21a was 0.6 compared with 1 for H901. Neither strain can be recommended unequivocally for teaching purposes; instead, the advantages and disadvantages of each must be considered. Both strains have been deposited in the American Type Culture Collection (Ty21a = ATCC 33459 = CDC 2861-79; H901 = ATCC 33458 = CDC 2862-79).

AN 1983:177053 BIOSIS

DN BA75:27053

TI EVALUATION OF 2 **SALMONELLA-TYPHI** STRAINS WITH REDUCED VIRULENCE FOR USE IN TEACHING AND PROFICIENCY TESTING.

AU HICKMAN F W; RHODEN D L; ESAIAS A O; BARON L S; BRENNER D J; FARMER J J III

CS ENTERIC SECTION, CENT. INFECTIOUS DISEASES, CENT. DISEASE CONTROL, ATLANTA, GEORGIA 30333.

SO J CLIN MICROBIOL, (1982) 15 (6), 1085-1091.
CODEN: JCMIDW. ISSN: 0095-1137.

FS BA; OLD

LA English

L8 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2

AB A controlled field trial was performed in Egypt to evaluate a whole cell typhoid **vaccine** prepared with a **nonmotile** mutant of *S. typhi* Ty2 (TNM1) devoid of flagellar antigen. This **vaccine** did not elicit an H antibody response, but significant Vi and O agglutinin responses were observed. There were 34 typhoid cases among 21,063 6-7-yr-old children who received the TNM1 **vaccine**, and 44 cases among 21,017 children in the control group who received tetanus toxoid. TNM1 **vaccine** probably does not provide protection against typhoid fever. H antigen may be an important component of an effective **vaccine**.

AN 1976:172204 BIOSIS